

Visual Resources / Aesthetics Analysis

PHOTOVOLTAIC SOLAR FARM

SOL ORCHARD - VALLEY CENTER, CALIFORNIA

MUP 3300 11-027

ENVIRONMENTAL LOG NO. 3910 11-08-010

December 2011

Prepared for:

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Executive Summary

This Visual Analysis for the proposed Sol Orchard, LLC – Valley Center Photovoltaic (PV) Solar Farm Project (Project) provides an evaluation of potential Project impacts on existing visual resources and character of the surrounding community of Valley Center, California.

With regard to visual resources, the Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the surrounding community by conflicting with visual elements or quality of an existing area (i.e., through conflicting style, size, coverage, scale, building materials, etc.). The Project would not result in the removal of or substantial adverse change to one or more features that contribute to the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area. The Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, or County Zoning Ordinance.

For the above reasons, it was determined that the proposed Project would not result in potentially significant impacts on visual resources within the Valley Center community. As such, no mitigation measures are required or proposed.

1.0 Introduction

1.1 Purpose

The purpose of this Visual Resources/Aesthetics Impact Analysis is to assess the potential visual impacts of the Project, determine the significance of the impacts under the California Environmental Quality Act (CEQA), and to propose measures to avoid, minimize, or mitigate potential adverse visual impacts associated with construction of the proposed Sol Orchard, LLC – Valley Center Photovoltaic (PV) Solar Farm Project (Project) on the surrounding visual environment.

The Project is intended to allow for the installation and operation of a photovoltaic electrical generation facility and represents an opportunity to provide residents of Valley Center and the greater surrounding area with clean source of electrical power from renewable sources. As future population growth continues within San Diego County, the demand for electrical service will continue to increase accordingly. During the October 2007 wildfires, as well as other recent wildfire events, many residents within San Diego County experienced temporary shortages in available electrical power, due to the direct and/or indirect result of such fires. The Project represents an additional clean source of electrical power that would supplement energy currently supplied by the existing power grid, thereby reducing the potential for power shortages to occur and decreasing demands on the capabilities of the existing distribution system; refer to Figure 1, Regional Location Map, and Figure 2, Local Vicinity Map/Key Viewpoint Locations.

1.2 Key Issues

Key issues to be evaluated in this analysis are whether the Project has the potential to adversely impact the existing visual character or quality of the affected properties and/or the physical or natural surroundings. Potential visual effects are considered from public roadways and other public vantage points in and around the Valley Center community. Project design attributes; the potential to remove, change, or add features that contribute to the existing quality of the visual landscape; and, potential conflicts with applicable plans or policies relating to visual resources are considered.

1.1 Principal Viewpoints to be Covered

The Project site would be intermittently visible from a number of principal public viewpoints within the Valley Center area, as follows:

- ☞ Valley Center Road (S6) looking northeast
- ☞ Valley Center Road (S6) looking northwest
- ☞ Vesper Road looking southwest
- ☞ Coolwater Ranch Lane looking northwest

Other views may occur from surrounding public vantage points, such as the Hell Hole Canyon County Open Space Preserve to the east/northeast and/or Dixon Dam and Lake City Park to the southwest. As the Project site lies along the valley floor, views to the site are restricted. Limited views may occur from surrounding residential, industrial, and/or agricultural uses on private lands within the valley or on hillsides surrounding the valley floor, but would generally be visually reduced due to intervening vegetation, development, and/or elevational differences, in addition to distance from the Project site.

2.0 Project Description

2.1 Project Location

The proposed Project site is located just east of the community of Valley Center, California, within north-central San Diego County. The Project site is bordered by Vesper Road to the north and Valley Center Road (County Highway S6) to the south, and is generally located between Almona Way to the west and Mac Tan Road to the east. The affected County Assessor Parcel Number (APN) is 188-290-20; refer to Figure 1, Regional Location Map, and Figure 2, Local Vicinity Map/Key Viewpoint Locations.

2.2 Project Description

The Project proponent is preparing an application for development and operation of a photovoltaic (PV) solar farm to be located on privately-held lands near Valley Center. The Project would require approval from the County of San Diego for a Major Use Permit (MUP) to allow for the construction, operation, and maintenance of such facilities for the long-term generation of solar energy. The proposed facilities would have an overall production capacity of 7.5 Megawatts (MW) (alternating current – AC). The Project is expected to supply roughly 30-90 percent of power delivered to the Valley Center area, depending on the time of day.

The proposed PV solar facilities would be installed on a portion of an approximately 55-acre parcel, under the ownership of the Project applicant, to achieve the intended MW output; however, development and MUP authority would be limited to approximately 46 acres of the parcel, allowing the unaffected acreage to generally remain in its present state (single-family residential use with supporting outbuildings, with exception of removal of an existing mobile home).

The photovoltaic panels would be manufactured at an offsite location and transported to the Project site. The Project design would consist of photovoltaic solar panels that are mounted on a collection of single-axis tracking (SAT) systems supported by machine-driven H-pile posts. The solar panels would be either mono- or poly-crystalline silicon cell modules, supported on a galvanized driven H-pile post system. In isolated cases where geotechnical constraints are encountered, a ballast foundation system would be provided. The solar panels would be aligned in rows that rotate to face east in the morning and west in the afternoon hours, tracking the sun about a north/south axis to maximize solar absorption. The panels would be rack-mounted

three-wide, measuring approximately 9.5 feet across each row when flat (horizontal). When fully inclined to 45-degrees, the upper edge of the highest panels would be 8-11.5 feet from the ground surface, depending on terrain. When flat, all panels would be 4.5-8 feet above ground depending on terrain. As the maximum height of the proposed PV solar panels would range from approximately 8-11.5 feet as measured from ground surface, the solar panels would not represent elements of large scale or height within the existing landscape. The ultimate arrangement/number of PV solar panels, racking, inverter pads and structures, and internal access are shown in on the MUP Plot Plan to illustrate the general configuration of the proposed solar collection system; however, this layout is subject to modification at final engineering design. Refer to Figure 3A, Major Use Permit Plot Plan – Sheet 1 of 2, and Figure 3B, Major Use Permit Plot Plan – Sheet 2 of 2.

2.2.1 Panel Interconnections, Inverters, Distributed Transformers and Switch Gear

Panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Wire depths would be in accordance with local, State, and Federal codes. Gathering lines would connect individual panel array strings to one or more inverters/transformers and combiner boxes. Wiring from the panel strings would be connected to combiner boxes, and electrical current would then be transferred to the inverters which would convert the Direct Current (DC) produced by the PV panels into Alternating Current (AC). A pad-mounted transformer installed next to each inverter would increase the voltage. The AC would then travel through underground gathering lines to a common utility interconnection point.

2.2.2 System Interconnection Points

Energy generated by the Project would be delivered underground to an existing 12 kV distribution line that runs parallel to Valley Center Road; refer to Figure 3A. Connection would be made from the Project site via trench or boring under Valley Center Road. The proposed underground connection would be consistent with the San Diego General Plan Update requirement for new development to place underground utilities to “maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.”

2.2.3 Inverter Enclosures

Approximately seven small-scale, aboveground structures would be constructed within the solar panel fields to weatherize inverter/distributor transformers and switching gear. These structures would be approximately 11 feet by 36 feet in size, and 10 feet in height at the apex, and constructed on a one-foot high, level concrete building pad; refer to Figure 3B, Major Use Permit Plot Plan – Sheet 2 of 2. The structures would be constructed of non-flammable materials (i.e., steel) with a metal roof. Each structure would be designed with screened ventilation to allow for the circulation of air for cooling purposes. The AC generated would be transferred from the inverters via underground gathering lines.

2.2.4 Valley Center Substation

The existing Valley Center Substation, located approximately one mile to the southwest of the Project site, is owned and operated by SDG&E. No modifications to the Substation or upgrades to the transmission line along Valley Center Road (also owned by SDG&E) would be required to accommodate power generated by the proposed Project. As such, these facilities would not be under the ownership of Sol Orchard, LLC, and are therefore not considered as part of the MUP application.

2.2.5 Grading

The PV solar panels would be installed in parallel rows running north/south; refer to Figure 3D, Preliminary Grading Plan. Although the majority of land surface in the MUP area is flat, portions would be cleared and grubbed to allow for installation of the panels and associated facilities. No onsite or offsite grading or landform modification is proposed.

2.2.6 Lighting and Glare

Limited Project lighting would be installed to allow for security. Low-level lighting would be installed at the main entry gates on Vesper Road to allow for safe ingress/egress. All Project lighting would be operated manually or activated via motion sensors, and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements and the Valley Center Design Guidelines, as applicable.

The PV solar panels would be either mono- or poly-crystalline material and would be black in color and highly absorptive. The materials used to construct the panels are designed to

minimize the potential for reflection and retain as much of the solar spectrum as possible, thereby reducing glare. Additionally, based on technical evidence evaluating the reflectivity of the PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area, or that would produce reflective light that would create adverse disability or discomfort glare; refer to Section 5.5, Determination of Significance (Significance Criteria #1) - Glare Effects, for a more in-depth discussion of specific technical studies performed to determine the potential effects of glare relative to other PV solar facilities constructed to date.

2.2.7 Signage

Minimal Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. Signage is proposed to be installed on the fence in the vicinity of the main entry gates off of Vesper Road. Signage would identify the Project operator and owner as Sol Orchard, LLC, and would provide emergency contact information. All signage would conform to County of San Diego and Valley Center Design Guidelines signage requirements for the applicable zone. No freestanding signage is proposed as part of the Project.

In addition, small-scale signage would be posted at the main entry gates, as well as intermittently along the perimeter fencing on all exterior parcel boundaries, to indicate “No Trespassing” and “Private Property” for security, as allowed by County regulations.

2.2.8 Access / Circulation

Construction Access

All materials for Project construction would be delivered to the site by truck. The majority of truck traffic would occur on designated truck routes and/or major streets, with primary access occurring from Vesper Road. Traffic resulting from construction activities would be temporary and may occur along area roadways as workers and materials are transported to and from the Project area. No offsite roadway improvements are proposed that would require construction activities on either Vesper Road or Valley Center Road; however, limited activities along Vesper Road (pathway construction, transport of Project components and/or landscaping materials to the site, etc.) may temporarily affect traffic flows along the roadway. If required by the County, the Project applicant would prepare a Traffic Mitigation Plan to ensure that circulation on area roadways is not adversely affected and that public safety, as well as the safety of Project construction workers, is maintained. The need for a Traffic Mitigation Plan would be

determined by County Department of Public Works (DPW) staff during the MUP process and would be a Condition of Approval, prior to issuance of a building permit.

Long-Term Access

As stated above, no offsite roadway improvements are required along Vesper Road or Valley Center Road to provide access to the proposed facilities. Long-term primary access to the Project site would be provided from Vesper Road. Interior access would be provided by a looped 24-foot wide perimeter fire access road that would be maintained to provide a fire buffer as well as to facilitate onsite circulation for emergency vehicles. In addition, a system of internal roadways, 24 feet in width, would be provided approximately every 300 feet between the blocks of PV solar panels (approximately 150 feet to either side) for emergency access. Additional roads are also proposed within the MUP areas for maintenance purposes; refer to Figure 3A, Major Use Permit Plot Plan (Sheet 1 of 2).

In order to control dust during the life of the Project, a non-toxic, biodegradable, permeable soil-binding agent or permeable rock material would be applied to all disturbed or exposed surface areas as follows: a) A permeable soil-binding agent suitable for both traffic and non-traffic areas shall be used. These agents shall be biodegradable, eco-safe, with liquid copolymers that stabilize and solidify soils or aggregates and facilitate dust suppression; or, b) Alternatively, a permeable rock material consisting of either river stone decomposed granite or gravel could be placed in a thin cover over all exposed surface area in-lieu of the binding agent referenced above. The binding agent would be reapplied approximately every two-three years for maintenance purposes.

2.2.9 Landscaping and Fencing

Landscaping (several rows of orange trees) is proposed for screening purposes along Vesper Road. Landscaping in the form of evergreen vine, such as bougainvillea species, Guinea gold vine, Japanese honeysuckle and/or star jasmine, would be planted to screen views into the site from private land ownerships adjacent to the property. Additionally, Toyon and coast live oak would be planted along the southern exposures including along the boundary of the site (near Valley Center Road); refer to Figure 3C, Conceptual Landscape Plan. A 6-foot high chain-link security fence (plus one foot of two-strand barb wire) would be installed along the Project perimeter, including along Vesper Road and Valley Center Road.

Although the Valley Center Design Guidelines discourage the use of chain link fencing, the Project design includes landscaping (existing and proposed) along the perimeter of the fence to

screen both views of the fence and of the Project components. Landscaping is proposed along the perimeter of the Project site where adjacent residential uses are present or where private views may occur if the offsite intervening vegetation is removed. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite private vantage points.

2.2.10 Project Schedule / Phasing

The Project would not be phased and would be constructed as a single event. Construction is expected to begin in second quarter 2012, with the facilities being in full operation by fourth quarter 2012. It is anticipated that overall construction of the Project would take approximately six months to complete, with crews working five days per week, eight hours per day.

2.2.11 Trails

No offsite roadway improvements are proposed as part of the Project; however, the Project as designed would provide for construction of a 10-foot wide pathway along the southern side of Vesper Road, consistent with County requirements and the Valley Center Community Trails and Pathways Plan and County Trail Design and Construction and Design Standards. The pathway would be constructed to the satisfaction of the County of San Diego, Director of Public Works and Director of Parks and Recreation. The pathway would be constructed along the Project frontage within the right-of-way as a condition of Project approval and would be dedicated to the County for long-term management and to allow for public recreational use.

A public trail would also be constructed to provide a direct north/south connection between Vesper Road and Valley Center Road. The trail would run along the western Project boundary and would be constructed to 10 feet in width within a 15-foot wide easement.

No roadway improvements are proposed along Valley Center Parkway; however, as the County plans to widen and improve Valley Center Road in the future, the Project proposes an Irrevocable Offer of Dedication (IOD) required to complete a 53-foot one-half right-of-way (ROW) width from the ultimate future centerline along the Project frontage. This would allow for future construction of a pathway by the County within the ROW, as appropriate, at the time when improvements to Valley Center Road are made.

Public trails in the area that may have views to the Project site include those within the Hell Hole Canyon County Open Space Preserve, located approximately one mile to the east/northeast of the Project site.

2.3 General Plan Land Use Designations and Zoning

General Plan land use designations and zoning for the affected parcels are given in Table 1, below. No changes to either the existing General Plan land use or zoning are proposed with the Project.

TABLE 1
EXISTING GENERAL PLAN LAND USE / REGIONAL CATEGORY / ZONING

Assessor Parcel Number	Approximate Acreage	General Plan Land Use Designation	Regional Category	Zoning
188-290-20	46*	SR-4	(Semi-Rural Residential)	(A70) Limited Agriculture

* The Project would be limited to 46 acres of the 55-acre parcel.

2.3.1 Anticipated Permits and Agency Approvals Required

The County of San Diego will act as the Lead Agency under the requirements of the California Environmental Quality Act (CEQA). Approval from the County of San Diego would be required for construction permits, as well as for right-of-way encroachment permits, if applicable, prior to commencement of ground-disturbing activities. The anticipated permits and approvals required are listed in Table 2.

TABLE 2
APPROVALS AND PERMITS ANTICIPATED

Permit/Approval	Approving Agency
Major Use Permit	County of San Diego – Department of Planning and Land Use
Air Quality Permit to Construct	Air Pollution Control District
National Pollutant Discharge Elimination System (NPDES) Permit	San Diego Regional Water Quality Control Board (RWQCB)
General Construction Storm Water Permit	RWQCB
Right-of-Way Encroachment Permit	County of San Diego Public Works Dept.

2.4 Regulatory Framework

2.4.1 State of California Guidelines

The Project is subject to technical and environmental review pursuant to the California Environmental Quality Act (CEQA), in conformance with applicable regulatory guidelines established by the County of San Diego.

Appendix G of the CEQA Guidelines states that a project has the potential for a significant impact if it will:

- a) Have a substantial adverse effect on a scenic vista;
- b) Substantially damage scenic resources, including, but not limited to: trees, rock outcroppings, and historic buildings within a state scenic route;
- c) Substantially degrade the existing visual character or quality of the site and its surroundings; or,
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area.

In addition, CEQA Section 15064 (b) states "...the significance of an activity may vary with the setting ... an activity which may not be significant in an urban area may be significant in a rural area." This statement is applicable to the determination of the significance of a visual effect for the Project.

2.4.2 San Diego County Plans and Policies

The Project is subject to conformance with several plans and policies that pertain to issues such as land use and zoning, visual resources, and the overall character of the Valley Center community. The following documents were reviewed and Project conformance with such documents was evaluated to determine the Project's consistency with the goals, objectives, and policies, as well as measures relative to design. The applicable goals, objectives, and policies are identified below, and a discussion of Project consistency with such measures is included in Appendix A of this document.

- ☞ County of San Diego General Plan Update
- ☞ Valley Center Community Plan

- ☞ County of San Diego Zoning Ordinance
- ☞ Valley Center Design Guidelines

San Diego General Plan Update

The County of San Diego General Plan Update (adopted August 3, 2011) is intended to provide guidance for the long-term development of San Diego County. The General Plan Update includes various Elements that provide guidance for accommodating future growth while retaining or enhancing the County's rural character, its economy, its environmental resources, and its unique communities. Goals, policies and objectives are provided within each of the Elements to guide future land development and ensure consistency with the County's intended vision for the future of San Diego County. The Guiding Principles of the General Plan Update are to:

- ☞ Support a reasonable share of projected regional population growth;
- ☞ Promote health and sustainability by locating new growth near existing and planned infrastructure, services, and jobs in a compact pattern of development;
- ☞ Reinforce the vitality, local economy, and individual character of existing communities when planning new housing, employment, and recreational opportunities;
- ☞ Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County's character and ecological importance;
- ☞ Ensure that development accounts for physical constraints and the natural hazards of the land;
- ☞ Provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns and, when appropriate, plan for development which supports public transportation;
- ☞ Maintain environmentally sustainable communities and reduce greenhouse gas emissions that contribute to climate change;
- ☞ Preserve agriculture as an integral component of the region's economy, character, and open space network;
- ☞ Minimize public costs of infrastructure and services and correlate their timing with new development; and,
- ☞ Recognize community and stakeholder interests while striving for consensus.

Chapter 3 - Land Use Element

Planning for Sustainability

Policies

- ⌘ **LU-6.9 Development Conformance with Topography.** Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and, to utilize natural drainage and topography in conveying storm water to the maximum extent practicable.

Semi-Rural/Rural Lands

Policies

- ⌘ **LU-10.2 Development - Environmental Resource Relationship.** Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character and avoid sensitive or intact environmental resources and hazard areas.

GOAL LU-12

Infrastructure and Services Supporting Development.

Policies

- ⌘ **LU-12.4 Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.

Chapter 5 – Conservation and Open Space Element

Visual Resources

According to the Conservation and Open Space Element, a highway corridor generally includes the land adjacent to and visible from the vehicular right-of-way. A “scenic highway” may include “any freeway, highway, road, or other vehicular right-of-way along a corridor with considerable natural or otherwise scenic landscape.” A highway may be designated as “scenic” depending on how much of the natural landscape can be seen by travelers, the aesthetic quality

of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

The Conservation and Open Space Element designates Valley Center Road as a County Scenic Highway. Table 3, below, identifies the distance to the Project site and the potential visibility of the site from the roadway.

**TABLE 3
COUNTY SCENIC ROADWAYS**

Roadway	Distance to Project Site	Visibility of Project Site
Lilac Road/Valley Center Road (S6) from State Route 76 to State Route 76	Adjacent to the southern Project boundary	Direct views into the Project site from vehicles traveling east/west along the roadway.
Lake Wohlford Road from Valley Center Road east (Escondido City limits) to Valley Center Road (excluding portion within City of Escondido)	1.5 miles east of Project site	The only portion of this route that could potentially be visible from the Project site would be the intersection of Lake Wohlford and Valley Center Road. The flat terrain and mature vegetation within the valley would otherwise obscure views to the Project site. Additionally, the Valley View Casino is located at this corner.

Goal COS-11

- ∞ **Preservation of Scenic Resources.** Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

Policies

- ∞ **COS-11.1 Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- ∞ **COS-11.2 Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
- ∞ **COS-11.3 Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:

- Creative site planning;
 - Integration of natural features into the project;
 - Appropriate scale, materials, and design to complement the surrounding natural landscape;
 - Minimal disturbance of topography;
 - Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and,
 - Creation of contiguous open space networks.
- ⌘ **COS-11.5 Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.
- ⌘ **COS-11.7 Underground Utilities.** Require new development to place utilities underground and encourage “undergrounding” in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

GOAL COS-13

- ⌘ **Dark Skies.** Preserved dark skies that contribute to rural character and are necessary for the local observatories.

Policies

- ⌘ **COS-13.1 Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- ⌘ **COS-13.2 Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.
- ⌘ **COS-13.3 Collaboration to Retain Night Skies.** Coordinate with adjacent Federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

Air Quality, Climate Change, and Energy

GOAL COS-14 – Sustainable Land Development

Policies

- ∞ **COS-14.4 Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.

San Diego County Zoning Ordinance

Portions of the County Zoning Ordinance that may affect the assessment of visual impacts are generally zoning overlay designators. Relevant designators include:

- ∞ B – Community Design Review Area
- ∞ D – Design Review Area
- ∞ G – Sensitive Resource
- ∞ H – Historic/Archaeological Landmark or District
- ∞ J – Special Historic District
- ∞ S – Scenic Area

None of the above designators apply to the Project site, with exception of the G designator relative to structure height.

2.4.3 Design Policies and Guidances

Valley Center Community Plan

The Valley Center Community Plan is supplemental to the County General Plan and provides goals and policies to guide development of the Valley Center area of north-central San Diego County, which includes the Project site.

1. COMMUNITY CHARACTER

GOALS

- ∞ 1. Preserve and enhance the rural character of Valley Center by maintaining a pattern of land use consistent with the following regional categories.

B. SEMI-RURAL LANDS

- ∞ Preserve and maintain the overall rural and agricultural character of the semi-rural areas.

2. LAND USE

GENERAL GOALS

- ∞ A pattern of development that conserves Valley Center's natural beauty and resources, and retains Valley Center's rural character.
- ∞ Development that maintains Valley Center's rural character through appropriate location and suitable site design.

COMMERCIAL GOAL

POLICIES AND RECOMMENDATIONS

- ∞ 6. Commercial/civic uses shall not interfere either functionally or visually with adjacent land uses or the rural atmosphere of the community.
- ∞ 7. Commercial/civic uses shall be periodically reviewed to ensure that the standards for noise, light, traffic, odors and all other conditions of approval are continuing to be met.
- ∞ 8. Discourage commercial and civic uses outside of the Villages and limit all such uses to those that are clearly demonstrated as needed and which are compatible with the rural lifestyle of the Valley Center Community Plan.

4. MOBILITY

GOAL

- ∞ A circulation system that achieves the combined objectives of connectivity and safety for all users (automobiles, bicyclists, equestrians and pedestrians), and also preserves the rural character of the community.

POLICIES AND RECOMMENDATIONS

- ∞ 6. Existing trees and vegetation located within the "Right-of-Way" of all public roads, and determined to be of significant visual benefit shall be transplanted or replaced consistent with the Valley Center Design Guidelines.
- ∞ 8. Woods Valley Road from Valley Center Road, east to Paradise Mountain Road and, Lilac Road from Old Castle Road to Highway 76 are significant aesthetic resources. Future improvements should maintain as much of their original character as possible without compromising safety.

6. CONSERVATION

GENERAL GOALS

- ∞ Provide for a "dark sky" which would retain the rural setting and not detract from astronomical research at Palomar Mountain.

POLICIES AND RECOMMENDATIONS

- ∞ 17. During the discretionary permit process, encourage the dedication of trails to form a local trail network with a central unifying hub near Cole Grade and Valley Center Roads.
- ∞ 18. Use low sodium lights and light shielding for new subdivisions and use permits as required by the "Dark Sky" Ordinance for those properties within a specified radius of the observatory at Palomar Mountain.

Valley Center Design Guidelines

PART I. COMMUNITY DESIGN OBJECTIVES

Design Objective 1: Valley Center Parkway

- ∞ Designate Valley Center Road as a special Parkway serving as focus and unifying element of the community.
 - Modification of County standards to give the road a more rural character.
 - Landscape design concept to duplicate the feeling of Woods Valley Road.

Design Objectives

A. Roadway Design - Important Thoroughfares

1. Valley Center Road

- ∞ As the most important single element of the community's image, Valley Center Road should become a carefully-planned parkway serving as the focus and unifying element of the community.
- ∞ The parkway should have a planted median of trees, shrubs, grasses and granite boulders emphasizing elements of the native valley landscape. The median can be incorporated into a new roadway design when Valley Center Road is widened at a future date.

2. Design of the Road Edge

- ⌘ A twenty-foot deep landscaped edge zone is to be provided along the entire length of Valley Center, Cole Grade, Woods Valley and Lilac Roads. The edge zone will reinforce Valley Center's character as a rural residential community by emphasizing planting of native vegetation, low walls of local stone, wood rail and agricultural fences to give the road edge visual definition and continuity. The edge zone is a requirement for new development in the community. Criteria for its design are given in Design Guideline, "Design of the Road Edge."

3. Underground Utilities

- ⌘ The undergrounding of overhead utilities on Valley Center Road should be implemented as soon as possible. The community is committed to reducing the present harmful visual impact of utility poles and wires throughout Valley Center.

PART III. THE DESIGN GUIDELINES

1. Site Design Process

B. Site Design Concept

Relationship to the Community and Neighboring Properties

- ⌘ Does the site plan respect the existing views, privacy, quiet, sun and light exposure of neighboring properties?

Relationship to Existing Natural Features

- ⌘ Has the project made a sufficient effort to minimize grading and alteration of natural landforms?
- ⌘ Does the project retain important vegetation, rock outcroppings, and other natural features?

2. Protection of Natural Features

Guidelines:

- ⌘ Hierarchy of Importance. Development on all sites will require judgment about which natural features are most important to preserve. Although a consistent rule is not possible, the general order of importance in retention shall be:
 - (1) Natural contours and landforms;
 - (2) Large rock outcroppings;
 - (3) Natural drainage courses;

- (4) Oak and sycamore trees;
- (5) Other mature specimen trees; and,
- (6) Views.

☞ Other mature trees should be retained where feasible. This will require careful judgment weighing the value and hierarchy of all natural features, the size and species of the tree, and the developer's program for the site. This should not preclude removal of noxious or undesirable trees.

D. Topography.

☞ Building pads are to be sited within the zoned setbacks and are to disturb the natural contours as little as possible. Balancing of cut and fill areas is encouraged. See "Save the Oaks and Sycamores" (Guideline 3) for grading techniques necessary for the preservation of existing oaks.

F. Views.

☞ Existing views important to neighboring properties shall be studied and preserved where feasible. New site plans for housing should take advantage of potential views from the site. Two types of views are important:

- Views from adjoining roads and lots through the site; and,
- Views from within the site.

☞ Natural features worth "viewing" include mountains, valley views, open spaces of existing flood plains, streams, lakes, tree stands, and western horizons.

4. Design of the Road Edge – Valley Center, Cole Grade, Lilac, and Woods Valley Roads

A. Landscaped Edge Zone.

☞ A minimum 20 feet deep landscaped zone (the front 20 feet of the property) shall be located along the major road edge, interrupted only by permitted access driveways and sidewalks. No buildings or off-street parking areas are to be located in this zone.

C. Character and Elements.

☞ The landscaped zone should reinforce Valley Center's character as a rural residential community. If walls or fences are used in landscaping, low walls of native stone, wooden rail fences, agricultural fences, placement of native rocks and boulders are recommended to give the road edge zone visual definition and prominence. Gateways and driveways may be given special emphasis.

F. Signs in conformance with the Design Guidelines are permitted.

5. *Architectural Character*

E. Walls, Fences and Accessory Structures

1. Fences and Walls

- ∞ Fences and walls are used to provide security, visual privacy, and/or define a space. The impact of a fence or wall on the surrounding neighborhood is determined by its size, type, layout, and character. Fences and walls should be minimized along public streets.
- ∞ Walls and fences should be designed to be compatible with the surrounding landscape and architectural concept.
- ∞ The following is a list of wall and fence materials whose use is not acceptable:
 - Chain link or open wire, except in landscape-screened service or security areas.
 - Corrugated metal
 - Bright colored plastic
 - Reed material

8. *Visual Linkages Between Planting, Buildings, and Open Spaces*

Guidelines:

- ∞ Tree masses are a valuable means of defining outdoor spaces and visually linking a site development to the larger community landscape.
- ∞ Trees planted in rows along roads, site boundaries and in orchards are common in rural areas and may be used in similar patterns where site conditions suggest.

9. *Planting Design and Plant Lists*

Guidelines:

A. Planting Design Principles

- ∞ Valley Center is a rural community. To protect its rural atmosphere, new plantings must be compatible with the existing natural landscape and desired community character, both in form and arrangement.
 - 1. Roadway and road edge planting on private property should reflect:
 - a. The natural grouping of trees in clusters, as opposed to traditional rigid alignment in urban areas.

- b. Limited use of shrubs in plantings with trees and ground covers. Arid plant communities do not naturally support a great number of plants.
- c. Naturalized plant arrangements as opposed to stylized.

11. *Site Lighting*

General Requirements

- ☞ Site lighting shall be limited to that necessary for security, safety, and identification. Other uses of site lighting for accent or decorative purposes is discouraged, except when provided by low-level fixtures and done in a careful manner. The Design Review Board will not recommend lighting plans that conflict with community character or provide excessive levels of lighting.

Site Lighting Fixtures

- ☞ Fixtures should be compatible with the architectural character of the buildings served.

3.0 Visual Environment of the Project

3.1 Project Setting

3.1.1 PV Solar Generation Facilities

Portions of the Project site are presently disturbed/developed. A total of seven vegetation communities occur within the Project site and include disturbed wetland, disturbed habitat, urban/developed, orchards and vineyards, intensive agriculture, row crops, and non-native grassland. Development onsite (within the portion not included as part of the MUP) includes a single-family residential unity, a small cabin, a mobile home (to be removed with the Project), and various supporting structures (two garages, barn/workshop, storage shed). Refer to Figure 4, Existing Views – Key Map, and Figures 5 and 6, Photo Survey – Onsite Photographs.

The Project site is generally flat and characterized by a shallow, northeast-southwest trending slope. Elevations range from approximately 1,455 to 1,412 feet above mean sea level (amsl). No major depressions, slopes, hilltops or ridgelines characterize the site. With the exception of one man-made earthen-lined drainage ditch that runs parallel and to the immediate south of Valley Center Road, no surface drainage features or water bodies occur in the area.

Three soil mapping units occur in the area and include Visalia sandy loam (0 to 2 percent slopes); Clayey alluvial land; and, Placentia sandy loam, thick surface (2 to 9 percent slopes) (USDA 2011). The dominant soil type within the Project area is Visalia sandy loam, which covers approximately three quarters of the site.

3.1.2 Surrounding Land Use

The Project area is located approximately 1.2 miles to the east of the community of Valley Center, which is in north-central San Diego County. The region is generally defined by Pala Mountain and Pauma Valley to the north and east, Bear Ridge and the Burnt Mountain Range to the south, and the Merriam Mountains and Interstate 15 to the west. Several Native American Tribal Lands occur in the region, none of which occur in the immediate vicinity of the Project site. No significant Preserve Lands, National Forest Lands, or Bureau of Land Management lands occur in the immediate area.

The “Town Center” of the Valley Center community generally tends to be more urban in nature, represented by a range of residential, commercial, and industrial-type uses occurring at

a higher density. Land uses become more rural as one travels into the surrounding lands where larger-acre, lower density single-family residential uses mixed with large- and small-scale commercial agricultural uses become more common.

Single-family residential uses combined with agricultural uses generally border the Project site on all sides. A citrus orchard (orange trees) is located to the north, while Valley Center Road borders the site to the south. A large oat hay farming operation lies just beyond Valley Center Road to the south. To the west and east are rural-residential uses combined with smaller-scale agricultural uses (e.g. nursery); refer to Figure 4, Existing Views – Key Map, and Figures 7 and 8, Photo Survey – Offsite Photographs.

The Project site is located along the valley floor, with the hillsides rising to the south, west, east, and northeast. Land uses along the hillsides are generally represented by single-family rural-residential uses. Due to their location at a higher elevation than the Project site, a number of homes to the south and homes located on sporadic knolls to the north may have views to the valley floor, and therefore, the Project site; however, such views are generally diminished by distance and intervening development and landscaping. Undeveloped or disturbed lands are interspersed throughout the valley floor.

3.1.3 Visual Quality Definitions

Visual quality is affected by the aesthetic characteristics of a particular area. Such aesthetic elements may include physical characteristics, as well as the perception of the viewer. Physical characteristics influencing the visual quality of an area may include such features as topography, landform, natural vegetation, water bodies, visual diversity, and visible coloring. Viewer perception is generally influenced by vividness, intactness, harmony, visual integrity, adjacent scenery, and/or visual unity. These elements all influence the overall evaluation of the quality of a particular view.

High Visual Quality

Areas with high visual quality may offer physical characteristics such as varying vertical relief; established natural vegetation with visually pleasing form, color, texture or pattern; water features; or, other elements that create a visually unified landscape. Particular views with high visual quality may include those with distinct focal points or patterns; enhanced or existing natural scenery; compatibility with the character of the surrounding landscape; and/or, a unique visual setting within the surrounding area.

Moderate Visual Quality

Moderate visual quality is generally considered to be represented by views that are interesting, but not visually exceptional with regard to landforms or other physical characteristics. Such views may consist of dominant types of vegetation; water features; colors within the landscape; or, other elements that visually unify a particular view or landscape. Contributing factors may include a varied composition that includes visual patterns created by landscape elements; enhancement of views from adjacent scenery; and/or, a visual setting that is distinguishable from, as well as visually similar to, views within the surrounding area.

Low Visual Quality

Low visual quality may be represented by areas with limited or no existing landforms or changes in topography; sparse or indiscernible vegetation types, due to density; absence of water features; monotonous color palettes; or, limited visual elements of varying visual interest. Visual quality may be considered to be low if views are varied, but visually disconnected; lack perceivable visual patterns; are adjacent to views that devalue the existing scenic quality; or, do not generally represent a visual setting that is common and/or valued within the surrounding area.

3.2 Project Viewshed

The viewshed is generally the area that is visible from an observer's viewpoint and includes the screening effects of intervening vegetation and/or physical structures. Viewsheds may occur from designated scenic viewpoints or from singular vantage points where an unobstructed view of visual components within the landscape exists. The viewshed is composed of such elements as topography and natural land features (i.e., hillsides, mountains) and other physical features within the landscape, such as buildings, vegetation, water features. Potential visual impacts within the viewshed may be affected by distance of the viewer from a site, the frequency and length of views, the personal perception of the viewer, and physical and/or atmospheric conditions at the time viewing occurs.

The Project site is located along the valley floor which is visible from numerous vantage points that occur from the surrounding hillsides. As such, the viewshed is generally defined by the surrounding mountainous topography which encircles the valley floor. Although this area is expansive, consideration of this viewshed provides the most comprehensive (largest) and conservative (worst-case) estimate of the area that could potentially be affected by the proposed

Project. Refer to Figure 9, Viewshed/Landscape Unit Map, which shows the viewshed in the area surrounding the Project.

Within the viewshed, varied views of the valley largely occur from vehicles as they descend (or ascend and look back to the valley) and passengers in vehicles traveling within the valley. Visitors utilizing the trails or other recreational facilities within the Hell Hole County Canyon Preserve to the east may also have varied views to the Project site. Due to existing topography, the viewshed includes the surrounding, low-density development and undeveloped lands along the valley floor, generally bounded by the surrounding hillsides. Due to the generally flat topography of the valley floor and the limited, low-lying vegetation typical of the environment, views across the expansive valley from surrounding vantage points within the viewshed do occur; however, distance from the object being viewed and intervening development and geological features have the potential to reduce or restrict views.

Figure 9, Viewshed/Landscape Unit Map, shows the general limits of the viewshed and the landscape units considered within the viewshed as part of this analysis. To characterize the visual pattern elements that occur within the Project viewshed, a number of key view locations within the valley were identified and representative photographs taken. Key viewpoints are described in detail in Section 5.2, Key Views. Key vantage points within the viewshed offering views of the site occur from Valley Center Road and Vesper Road, as well as outlying roadways along the surrounding hillsides. Due to the generally flat topography of the valley floor, views of the site from within the valley are generally obstructed by surrounding development and/or vegetation, and therefore, views are highly restricted.

3.3 Landscape Units

A landscape unit is an area that can generally be defined by visual and physical characteristics and may be composed of a limited area (i.e., meadow) or a larger area (i.e., portion of a mountain range). The overall boundaries of a landscape unit may generally be defined by topography, natural vegetation, architectural design, landforms, or similar types of land uses. Each landscape unit can be described individually and as varying from other adjacent landscape units. Each landscape unit is a portion of the regional landscape that often corresponds to a place or district that is commonly known among local viewers.

As the Project would affect a number of properties within the valley with installation of the PV solar panels and associated transmission facilities, several landscape units that may potentially be affected by construction of the proposed facilities were identified. Landscape Units are shown in Figure 9, Viewshed/Landscape Unit Map, and described below.

3.3.1 Landscape Unit #1

Landscape Unit #1 generally consists of the portion of the valley floor on which the Project site lies, encircled by the surrounding mountains. Within the Valley Center community, the valley floor is generally characterized by undeveloped lands, lands utilized for agricultural purposes, and lands with low-density development (typically one- to two-story single-family residential uses) on large-acre parcels. This Landscape Unit supports expanses of natural vegetation typical of the environment, including low-lying scrub, sparse groundcover, and annual grasses, as well as a mixture of established oaks and agricultural crops. This Landscape Unit is generally bounded to the north, east, and west by the mountains that rise from the valley floor. As much of the vegetation and topography are similar throughout this area, landscape components do not generally offer strong, visually distinctive patterns to viewers, particularly when viewed at a distance.

3.3.2 Landscape Unit #2

Landscape Unit #2 consists of the areas to the north and northeast of the Project site where single-family residential uses, mixed with limited agricultural operations, occurring at a higher density along the base of the hillsides. These uses are generally one-two stories in height and low-lying within the landscape. This Landscape Unit is generally defined by the hillsides to the north and east, and agricultural lands to the south and west along the valley floor. Vegetation largely consists of a mixture of ornamental landscaping combined with natural vegetation, as well as small-scale agricultural uses such as orchards and row crops. This Landscape Unit offers somewhat varied topographical differences as compared to adjacent lands as the hillsides rise from the valley floor.

3.3.3 Landscape Unit #3

Landscape Unit #3 consists of the mountain range to the north and east, which includes the Hell Hole Canyon County Preserve. These mountains serve as a dominant feature within the landscape and define the valley below. Rodriguez Mountain, in the southeastern portion, reaches over 3,500 feet amsl is a highly visible element of the range. This range offers views to the valley below; however, due to their height and distance from the valley, details within the landscape are diminished.

4.0 Existing Visual Resources and Viewer Response

4.1 Existing Visual Resources

Land affected by the proposed Project is generally lacking in significant visual resources. The parcel does not contain any County-defined steep slopes (defined as having a slope with a natural gradient of 25 percent or greater and a minimum rise of 50 feet) or other significant topographical features. Topography of the Project area (and adjacent lands) is generally flat. Refer to Figure 2, Local Vicinity Map/Key Viewpoint Locations, and Figures 5 and 6 which show the existing onsite conditions.

No prominent natural drainage features occur on the affected parcel. No rock outcroppings are present on any of the lands affected by the Project.

The majority of the northern portion of the MUP area currently supports a citrus orchard (orange trees); however, a large portion of the orchard is in a physically degraded state and therefore, does not represent vegetative habitat of high aesthetic value. Limited vegetation is present in the developed lands that generally comprise the central portion of the site. The southern portion of the site is dry farmed and varies visually, based upon the state of the crops and the time of year. A variety of junk/debris, automobiles, farm equipment, machinery, etc. is scattered around the site and would be removed with the Project, along with any illegally-occurring structures.

4.1.1 Visual Character/Visual Quality

The dominant visual character of the Project site is that of generally level topography supporting varied vegetation. Views from Vesper Road are dominated by the existing orchard which greatly restricts views into the developed areas of the site. Views from Valley Center Road are of the existing lands that are dry farmed and vary depending upon the time of year and the state of the crops. As the developed area of the site is distanced from this roadway, views of this portion of the site are limited.

Landscape Unit #1

Landscape Unit #1 generally consists of the portion of the valley floor on which the Project site lies, encircled by the surrounding mountains. Within the Valley Center community, the valley floor is generally characterized by undeveloped lands, lands utilized for agricultural purposes, and lands with low-density development. This Landscape Unit supports expanses of natural vegetation typical of the environment, including low-lying scrub, sparse groundcover, and annual grasses, as well as a mixture of agricultural crops.

Topography within this Landscape Unit is visually flat, due to its use for agricultural production, creating a pattern with limited variation. Limited elements with visual bulk, dominance, or scale occur within this landscape. Lands within this Unit are generally similar with regard to color, due to the vegetation they support.

The components within this Landscape Unit do not offer a high degree of visual contrast, due to the nature of the agricultural lands, and therefore, do not combine to create distinctive visual patterns. The landscape has a moderate degree of intactness, as it is generally free from competing visual elements. In addition, a sense of visual unity is evident, as the landscape components join together to generally form a coherent visual pattern.

Landscape Unit #2

Landscape Unit #2 consists of the areas to the north and northeast of the Project site where single-family residential uses, mixed with limited agricultural operations, occurring at a higher density along the base of the hillsides. Vegetation largely consists of a mixture of ornamental landscaping combined with natural vegetation, as well as small-scale agricultural uses such as orchards and row crops.

As much of the vegetation and topography are similar throughout this area, landscape components do not generally offer strong, visually distinctive patterns to viewers, particularly when viewed at a distance. This Landscape Unit offers somewhat varied topographical differences as compared to adjacent lands as the hillsides rise from the valley floor.

This Landscape Unit does not offer strongly contrasting landscape components that combine to form striking or distinctive visual patterns, and therefore, a memorable visual impression is generally not created. The landscape is largely free from encroachment of competing visual elements, due to the nature of the topography and existing vegetation, and is therefore visually intact. A sense of visual unity is achieved, as components combine to form a generally visually coherent pattern. Few built components within this Landscape Unit contribute to a sense of bulk or mass.

Landscape Unit #3

Landscape Unit #3 consists of the mountains to the north and east of the Project site, and includes the Hell Hole Canyon County Preserve. The mountains are readily visible within the landscape and support varied visual components that combine in distinctive visual patterns. The topography of this Landscape Unit offers visual forms with varied visual bulk, mass, and shape. Colors are also varied, based upon viewing distance to the forms, sunlight and time of day, and texture of the surfaces. This Landscape Unit offers a sense of vividness and creates a memorable visual impression through varied geologic forms, particularly when influenced by sunlight.

The mountains create a sense of visual dominance within the valley and offer a visually diverse pattern of elements within the landscape. This Landscape Unit supports landscape components that combine in distinctive visual patterns and provide visual contrast to other surrounding lands and the valley floor. This Landscape Unit offers landscape components that create a distinctive visual impression and sense of vividness. The mountains offer a unified and generally coherent visual pattern with few encroaching elements as they rise from the valley floor.

4.2 Viewer Response

Viewer response is based on both viewer sensitivity and viewer exposure. These elements influence how a viewer may potentially respond to a change in the visual landscape, particularly with regard to development of a site from a generally undeveloped condition. Viewer response varies based upon the type of viewer and the characteristics of the visual environment that would ultimately be affected (i.e., urban versus rural environment, established large-scale commercial area versus low density residential uses, etc.). Viewer response is largely influenced by viewer sensitivity and viewer exposure, as described in greater detail below.

4.2.1 Viewer Sensitivity

Viewer sensitivity to a change in the visual environment can be influenced by a number of factors, including the awareness of the viewer, personal interest in a particular visual resource, and/or viewer activity during the time that views of a resource occur (i.e., vehicle driver versus passenger, active versus passive viewing). In addition, the particular goals or values of a community can influence the sensitivity of viewers to a particular site, land area, or viewshed. Viewer sensitivity may vary between those with a vested interest in a community (i.e., residents) versus those traveling through an area with little or no knowledge of the community or existing visual landscape. Based on these conditions, viewer sensitivity can be assigned a value of low, medium, or high.

It is likely that community members would be more sensitive to the Project than would those who experienced Valley Center as a visitor. In addition, viewer sensitivity may be higher among those who would experience views of the site more frequently, such as area residents or commuters who would travel through the community, particularly those using Valley Center Road or Vesper Road, on a frequent basis on their way to other destinations (e.g. for purposes of work). As views of the Project components would also vary due to distance from the site, as well as travel speed and the degree to which one chooses to make an effort to view the site (e.g. turning of one's head), viewer sensitivity would further be influenced. It should be noted that Valley Center Road supports a moderate level of traffic traveling at high speeds.

4.2.2 Viewer Groups

Viewer groups would mainly consist of those individuals traveling east/west along Valley Center Road and Vesper Road, which would afford direct views into the site. Additional viewer groups from public vantage points would include residents of and visitors to the Valley Center area, as well as travelers along other public roadways, particularly at higher elevations along the hillsides. Additionally, users of the proposed 10-foot wide pathway along the Project frontage on Vesper Road would also experience views into the site. Visitors to the Hell Hole Canyon County Preserve and other mountains in the surrounding area would also experience views to the site from varied vantage points.

Additional viewer groups may include residents and/or occupants viewing the Project site from surrounding residential uses (particularly at a higher elevation than the site) to the north/northeast, south/southwest; agricultural uses to the north and south; and/or, properties directly adjacent to the Project site; however, such views of the Project from these vantage points would generally occur from privately-owned properties and not public viewpoints. Views from these private ownerships would largely occur at a distance from the Project and would be decreased due to distance and intervening vegetation and development.

4.2.3 Viewer Exposure

Views into the Project site from vehicles traveling along Valley Center Road and Vesper Road would vary, but would be limited and brief, due to travel speeds and the angle of the view with respect to the viewer (i.e., forward-looking versus turning one's head and looking back towards the subject property). Views of the site from other public roads at greater distances [e.g. Cole Grade Road, County Highway S6 (further to the north), and Lilac Road] may also occur intermittently. Viewer exposure from these roadways would vary, due to distance from

the site, intervening topography, development, and/or vegetation, and length of time the Project is actually visible from a particular location along the road.

In determining the exposure of each viewer group, several factors are considered. These include the number of viewers experiencing visual changes to the resource as the result of the proposed development, how long views would last, the anticipated speed at which viewers would be traveling, and the relation and distance of the viewer to the particular site.

Table 4, Viewer Groups and Anticipated Exposure, summarizes the anticipated viewer groups and the potential viewing experience of each.

**TABLE 4
VIEWER GROUPS AND ANTICIPATED EXPOSURE**

Anticipated Viewer Group	Number of Anticipated Viewers	Key Views	Distance to the Project Site	Anticipated Views with Project Implementation	Sensitivity	Duration of View
Drivers along Vesper Road	Estimated 200 to 400 people per day	#1	Adjacent	Intermittent views of solar panels and associated infrastructure / transmission lines	Medium	5-10 seconds
Drivers along Valley Center Road	Estimated more than 1,000 people per day	#2 and #3	Adjacent	Intermittent views of solar panels and associated infrastructure / transmission lines	Medium	Estimated 5-10 seconds
Drivers along Coolwater Ranch Lane	Estimated 100 to 200 people per day	#4	Approximately 0.9 mile Southwest	Intermittent views of solar panels and associated infrastructure / transmission lines	Low	Varied
Hell Hole Canyon County Open Space Preserve	Estimated 100 to 200 people per day (depending on season)	N/A	Far Distance / Approximately 2 miles	Varied land uses (Valley Center and surrounding land areas)	Low	Varied
Surrounding Private Residential Uses	Varied	N/A	Adjacent / Varied	Screened views of Project site / Intermittent views of solar panels and associated infrastructure / transmission lines	High to Low	Varied

4.2.4 Viewer Awareness

Viewer response is affected by the degree to which a viewer is receptive to visual details, character and quality of the surrounding landscape. A viewer's perception is affected by his/her activity and the degree to which he/she actively participates in noticing a change in the visual environment.

Viewer awareness to potential visual changes in the setting that may occur with the Project would be varied. A viewer would first need to be in a location within the surrounding area where the Project site was visible (e.g. from a higher elevation), then actively notice that a change in the visual landscape has occurred. Viewer awareness would also vary between local residents and those who are experiencing the area as a visitor, wherein the local residents would likely be more aware of a change in the visual environment. In addition, viewer awareness would also vary due to distance from the proposed facilities, as views occurring at a greater distance would diminish the visibility of the Project components within the landscape.

5.0 Visual Impact Assessment

5.1 Guidelines for Determining Significance

The California Environmental Quality Act (CEQA) Guidelines define “environment” to include “objects of...aesthetic significance (Section 15360).” As such, the County of San Diego has identified thresholds of significance to assess potential impacts resulting from proposed development.

The following significance guidelines are intended to provide guidance in the evaluation of whether a significant impact to visual resources would occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following:

- ∞ Introduction of features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines;
- ∞ Removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings;
- ∞ Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, a trail within an adopted County or State trail system, a scenic vista or highway, or a recreational area; or,
- ∞ The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District’s zoning.

5.2 Key Views

Several key views of the Project site from surrounding public vantage points were identified for the Project; refer to Figure 2, Local Vicinity Map/Key Viewpoint Locations, and Figures 10 through 13, which illustrate existing and proposed views of lands affected by the Project. As the Project site is located in the valley where terrain is generally flat, views to the site from surrounding locations along the valley floor do not occur or are highly restricted due to similar elevation. As one begins to ascend the surrounding hillsides, the potential for the Project site to

become more visible would increase; however, as the hillsides are distanced from the Project site, views of the site would decrease due to distance, intervening development, topography, and established vegetation. As such, the key views considered in this analysis are those that would occur to travelers along the adjacent roadways of Valley Center Road and Vesper Road, as well as from surrounding roadways located at a higher elevation than the Project site looking down to the valley below. As described below, views of the Project from these key vantage points would be affected by travel speeds, angle of the view (i.e., looking directly to the site or turning one's head to look back to the site), topography, and intervening vegetation and/or development.

5.2.1 Key View #1 - Vesper Road

Views of the Project site would occur to travelers looking southeast and southwest from Vesper Road; refer to Figure 10, View 1 (Visual Simulation) – View from Vesper Road, which shows the existing view from the roadway. Viewers from this location would mainly be passengers in vehicles traveling in either direction along Vesper Road.

Views along this roadway within the Project vicinity generally consist of citrus orchards and rural-type single-family residential uses, some with small-scale agricultural uses. As lands along this roadway within the valley are generally flat, views are typically limited to immediately adjacent properties, as views across the valley or to the surrounding hillsides are generally restricted by intervening development and established vegetation.

From this vantage point, the northern portion of the Project site where the citrus orchard (orange trees) is planted is visible. The trees are planted in repeating rows, set back from the road by approximately 20-25 feet; refer to Figure 10. The trees are generally not of great height and typically grow to 10-15 feet. The density of the trees and the visible depth to which they are planted onsite generally prevents views into the site.

The orchard presents a dominant visual feature in the foreground as one travels along the roadway; however, similar citrus orchards and other crops are planted along Vesper Road on adjacent properties and therefore, the orchard on the Project site does not represent a unique visual feature within the landscape. Although this Landscape Unit supports visual components that combine in distinctive visual patterns, it does not offer a high degree of visual contrast with regard to adjacent lands along valley floor.

From this vantage point, views of the Project site are brief, due to travel speeds and limited frontage along Vesper Road. Views would largely consist of the orchard and relatively level topography in the foreground, with highly limited and brief views of the onsite

developed/disturbed area in the background. The existing visual landscape offers somewhat memorable landscape components and distinctive visual patterns (although similar to adjacent orchard uses), and therefore, visual quality and character are considered to be medium.

The Project proposes to allow two rows of orange trees to remain adjacent to Vesper Road (and planting of one additional row of orange trees offset from the existing rows of trees, as shown in Figure 3C, Conceptual Landscape Plan), thereby screening views from the road into the area that would be developed with the PV solar panels. As such, views of the development would be limited from this location. Although views to the site would change as one travels along the roadway, viewer response is anticipated to be low, as the Project features would be set back from the road and would be screened, requiring a passenger to actively turn his head to look into the site to see the Project components; refer to Figure 10.

Additionally, based on the technical evidence evaluating the reflectivity of the PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare. The proposed Project as designed would be in accordance with the County's Guidelines of Determining Significance for Lighting and Glare. Refer also to Section 2.2.6, Lighting and Glare.

5.2.2 Key Views #2 and #3 - Valley Center Road (County Highway 6)

Views of the Project site would occur to travelers looking northeast and northwest from Valley Center Road (County Highway 6/SC 300); refer to Figures 11 and 12, Views 2 and 3 (Visual Simulation) – View from Valley Center Road, which show the existing views from the roadway. Viewers from this location would mainly be passengers in vehicles traveling in either direction along Valley Center Road. As mentioned previously, Lilac/Valley Center Roads are designated as County Scenic Highways along the length of their connection to State Route 76 (from State Route 76 to State Route 76).

Views along this roadway are generally defined by development along either side of the road, creating the sense of a linear corridor. As lands along this roadway within the valley are generally flat, views are typically limited to the immediate vicinity, as views across the valley or to the surrounding hillsides are restricted by intervening development and landscaping; however, intermittent views of the surrounding valley and the hillsides may occur while traveling along the roadway where such physical components are not present.

From this vantage point, the southern portion of the site where dry farming activities occur would be visible, with limited views of the disturbed/developed areas. From this vantage point, views of the Project site are brief, due to established natural vegetation on adjacent lands, intervening land uses, and travel speeds. Views would largely consist of low-lying agricultural crops and relatively level topography in the foreground, with limited views of the developed/disturbed areas in the background. The existing visual landscape does not offer memorable landscape components or distinctive visual patterns, and therefore, visual quality and character are considered to be low.

A portion of the proposed PV solar panels would be visible from this location. Although views to the site would change as one travels along the roadway, views of the PV solar panels from Key Views #2 and #3 would be significantly reduced through installation of the 6-foot chain-link fence and by the landscape screening proposed to be planted within the 20-foot wide zone adjacent to Valley Center Road to visually screen views into the property; refer to Figures 11 and 12. The solar panels would be aligned in rows that rotate to face east in the morning and west in the afternoon hours, tracking the sun about a north/south axis to maximize solar absorption. Therefore, passengers in vehicles along the roadway would view the panels from the side, as opposed to straight-on, thereby visually reducing the visual mass of the panels. Furthermore, although minimal vegetation that would screen views as one approached the site is present along either the western or eastern boundaries adjacent to adjoining ownerships, the panels would be located at a lower elevation than the roadway and partially screened from view by an existing earthen berm.

Viewer response to the visual change in the landscape is anticipated to be medium. Due to travel speeds along the road and the limited amount of time that views would occur along the property frontage, views into the site would be brief. It is not anticipated that installation of the Project components would significantly heighten viewer response or detract from the existing visual quality or character, particularly with the proposed landscape screening.

5.2.3 Key View #4 - Coolwater Ranch Lane / Other Public and Private Roadways

A number of public and private surface roads in the surrounding area may offer potential views of the Project site from vantage points occurring at higher elevations looking down to the valley below. To represent and evaluate such views, photographs were taken from Coolwater Ranch Lane, located approximately two miles to the southeast of the Project site; refer to Figure 13, View 4 (Visual Simulation) – View from Coolwater Ranch Lane. Viewers experiencing views

from such vantage points would largely consist of drivers and passengers traveling along these roadways, most likely residents of the area going to and from their residences.

Views from this vantage point would be of the valley below. Views would include a variety of uses, including rural residential, agricultural, and vacant or undeveloped lands, mixed with a variety of small-scale and large-scale agricultural crops, visible throughout the foreground, middleground, and background. Although the solar panels would be visible from this vantage point, distance from the Project and the relative height and size of the panels would reduce the visibility of the components within the landscape. In addition, intervening vegetation and existing development would also soften views of the Project site, thereby effectively blending the panels and reducing their visibility within the landscape. As demonstrated in Figure 13, views of the Project site appear similar to the variety of agricultural crops within the valley floor. Landscaping is proposed along the perimeter of the Project site where adjacent residential uses are present or where private views may occur if the offsite intervening vegetation is removed. The proposed planting of landscaping materials would be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite private vantage points. Viewer response to the visual change in the landscape is therefore considered to be low.

5.2.4 Hell Hole Canyon County Open Space Preserve

Views from the Hell Hole Canyon County Open Space Preserve (mentioned herein, but not analyzed as a Key View), located approximately two miles to the northeast of the Project site may offer intermittent views across the valley to the Project. Viewers from this location would mainly be passengers in vehicles traveling within the Preserve, or visitors utilizing the trails or other recreational facilities within the Park.

Varied topography and geological features are visible in the foreground with expansive views of the valley floor in the middle ground. Developed areas of Valley Center, surrounding undeveloped lands, and a variety of geological and topographical features also occur in the background. Views from this vantage point are generally considered to be of medium visual quality and character. Unique features within the landscape are visible, and an established visual pattern and compositional harmony is created by such elements within the foreground. Although visible, views of the Project site would be limited from this vantage point, due to the distance from the Project and the relative height and size of Project-related features. In addition, intervening vegetation and existing development would also reduce views of the Project site, thereby minimizing its visibility. More visibly noticeable features within the

landscape would likely attract a viewer's attention. Viewer response to the visual change in the landscape is considered to be low.

5.2.5 Surrounding Private Residential Uses

As the Project site is located along the valley floor, a number of private residential homes within the surrounding area may have limited views of the site, particularly those residences located immediately adjacent to the site or at a higher elevation. Such views of the Project site would be varied, depending on proximity to the site, viewing angle, and intervening development, vegetation, and/or topographical features. Per CEQA requirements, the potential effects of a project on existing visual resources are generally analyzed with regard to how views from public vantage points would be affected; however, views from private residential uses within the Project area are considered herein to ensure that potential visual effects are effectively minimized or avoided to the extent feasible.

The Project site is located adjacent to several single-family residential uses; refer to Figure 2, Local Vicinity Map/Key Viewpoint Locations. Views into the site from these residences are varied, depending upon where the residence is located. For example, views from the residence located adjacent to the southeastern property boundary would generally be of the area that supports dry farming activities. The neighboring residential uses to the northeast experience views of the onsite orchards or areas where dry farming occurs, with views of the developed portion of the site generally blocked. Views from the residence directly to the west and southwest consist of the developed area onsite, or of the area that is dry farmed. Views into the site from the homes located adjacent to the northwest portion of the Project site are partially blocked, due to a well-established orchard, although views looking south/southeast to the disturbed/developed area onsite do occur.

Furthermore, views of the Project site presently occur from residential uses located within the surrounding area. As the valley floor is generally flat, considered with existing elements within the visual landscape (e.g. development, vegetation, etc.), views of the Project site are largely blocked from such residential uses located along the valley floor; however, those residences located at a higher elevation may experience views of portions or all of the site.

With implementation of the proposed Project, the majority of the site would be developed with the proposed PV solar arrays which may be visible from surrounding offsite residential uses; however, such views would be restricted due to existing development, vegetation, and intervening topographic elements. Views from residences located immediately adjacent to the property boundaries would generally be of the PV solar arrays; however, a variety of vegetative

screening is proposed along the property boundaries adjacent to such residential uses in order to restrict views into the site from offsite vantage points; refer also to Section 2.2.9, Landscaping, and Figure 3C, Conceptual Landscape Plan. Additionally, Figure 13, View 4 (Visual Simulation) – View from Coolwater Ranch Lane, provides a representative view of the Project from such offsite locations at a higher elevation than the Project site. Existing views from offsite residential uses located at higher elevations would generally not be affected by the proposed perimeter landscape screening, as the Project components within the interior of the property would be visible; however, due to distance to the site and the limited height of the proposed PV solar panels and other Project structural elements, the Project components would not be highly visible within the surrounding visual landscape.

5.3 Assessment of Visual Character and Visual Quality

5.3.1 Assessment of Visual Character

Natural landforms, natural vegetation, and a mixture of agricultural, industrial, small-scale commercial, and single-family residential uses, as well as large parcels of undeveloped land exist in the area surrounding the Project; however, such visual components would generally not be adversely affected by the proposed development. The Project has been designed to avoid grading, requiring only clearing and grubbing, thereby leaving the topography of the site largely in its existing condition.

Construction would occur on the site and would generally be limited in visibility to surrounding parcels, and from Valley Center Road, with restricted views from Vesper Road. The Project would change the composition of the visual pattern in the existing onsite setting. The onsite physical character (i.e. presence of native vegetation, colors, visual diversity) would be altered with installation of the solar panels and associated facilities; however, with consideration of varied views to the site from offsite properties and travelers along nearby public roadways, the visual changes resulting from the Project would not dominate or substantially change the existing visual pattern of the area, nor would the Project incorporate elements that would substantially obstruct or diminish existing views; refer also to Figures 7 and 8 which illustrate views of the Project from surrounding public vantage points.

Similar industrial, agricultural, and commercial type elements exist within the surrounding area and support structural elements of similar or greater size, height, and/or appearance. Such elements may include large barns, oat hay storage canopies, facilities for animal

keeping/raising, grain silos, and other similar structures. As visibility of the site would be limited due to relative distance of the facilities from public roadways (approximately 120 feet from Vesper Road and Valley Center Road) and proposed screening of the Project components through the use of landscaping, an adverse change to the overall character of the existing visual pattern through the introduction of elements that would create visual dominance or scale is not anticipated with the Project. The proposed Project would not significantly change the visual character of the landscape, as the structural elements would be of limited bulk, mass, and scale, and views would generally occur from a distance. As such, the Project design would not substantially change the visual character of the surrounding landscape.

5.3.2 Assessment of Visual Quality

The visual quality of a view is partially influenced by the viewing location from which public views occur. The viewing location can allow for views that are generally either expansive in nature or focused on a specific view of a site or particular feature within the landscape. In addition, visual quality is influenced by the particular characteristics of the viewing corridor within which a view occurs. Visual quality is also affected by the quality of the overall viewshed area being viewed. Areas identified as having high visual quality are those which are identified as being sub-regionally important and possessing high scenic value.

Views of the onsite areas utilized for dry farming or that are developed/disturbed are considered to generally be of low visual quality consisting of relatively flat terrain and unvaried topography with few or no visual elements of scenic value. Views of the onsite orchard are considered to have a higher visual quality, with such agricultural uses contributing to the overall rural character of the Valley Center community; however such views are similar to those offered by a number of surrounding properties (e.g. to the north across Vesper Road; adjacent to the site to the northwest, etc.), thereby contributing to a sense of visual continuity, but not representing a unique visual element within the existing landscape. Additionally, the existing orchard creates a sense of visual bulk along Valley Center Road, with the repeating rows of trees offering a sense of visual unity along the Project frontage.

The visual quality of Project lands would be potentially affected during the construction phase of the Project. Views of the site would include grubbing/clearing and construction activities, presence of construction vehicles and workers, and storage of building materials. Existing vegetation (and proposed planting of additional trees) in the northern portion of the site would provide visual screening; however, construction impacts on visual quality would be temporary and short-term, and would ultimately be reduced when construction is complete.

As described above, views of the property from Vesper Road are limited. The site currently presents a landscape that is generally visually intact, and due to the nature of the onsite vegetation and the visual character of adjoining lands, is generally considered to have a sense of visual harmony with adjacent lands. Visual diversity is generally low, as views largely consist of the orange trees, with limited elements or features that would disrupt the visual landscape, and no visually significant natural or topographical features. As such, the affected lands are generally considered to have a medium visual quality; however, they are not considered to be subregionally important or possessing a high scenic value. Additionally, several rows of orange trees would remain with the proposed Project (and enhanced through additional proposed tree planting for screening purposes), and therefore, the visual quality of the site would not significantly change as the result of the proposed improvements. Improvements in this portion of the site would not significantly affect the existing visual quality of the area.

Views of the site along Valley Center Road would be brief, due to established natural vegetation on adjacent lands, intervening land uses, and travel speeds. This area is generally void of any significant vegetation or other landscape components of visual significance. This area is not considered to possess landscape components that create distinctive visual patterns or possess high visual quality. As such, the lands potentially affected along Valley Center Road are generally considered to have a moderate visual quality and are not considered to be subregionally important or possessing a high scenic value. Improvements in this portion of the site would not significantly affect the existing visual quality of the area. As the lands affected by the Project would be cleared and grubbed, onsite vegetation following Project implementation would be minimal. Landscaping for screening purposes is proposed along the 20-foot landscape zone adjacent to Valley Center Road. As such, the visual quality would be further enhanced following completion of the construction phase through the maturing of the proposed trees; however, as the existing visual quality of the affected parcels is not considered to be high, installation of the PV solar panels would not significantly reduce overall existing visual quality of the Project site. It is not anticipated that the Project would significantly affect the existing visual quality of the lands affected by the Project or of surrounding lands.

5.4 Assessment of Viewer Response

Viewer response to visual changes on the Project site with development of the PV solar facilities is anticipated to be varied, dependent upon the Project facilities being viewed and the location of the public vantage point. Viewer response during the construction phase may be greater because grading activities, construction equipment, and varying stages of panel installation may be visible from public roads within the Project vicinity. Once construction is completed, no

other changes to the visual landscape would occur, as no other development or physical improvements are proposed; however, the proposed landscaping for screening purposes would continue to mature over time.

The PV solar facilities installed in the northern portion of the site along Vesper Way would be located approximately 121 feet from the edge of pavement. Additionally, several rows of orange trees in this portion of the site would remain with Project implementation, and one additional row of orange trees would be planted, thereby further screening the Project components from view for travelers along the road. As a result, views to this portion of the site would be greatly reduced and intermittent. Viewer response to views of this area of the Project would be low, due to distance, intervening vegetation, and travel speeds.

Viewer response to Project-related facilities along Valley Center Road is also anticipated to be low. At the closest distance, the PV solar facilities installed in this portion of the site would be located approximately 116 feet from the edge of pavement (with the main concentration of panels installed at a greater distance); refer to Figure 3A, Major Use Permit Plot Plan (Sheet 1 of 2), thereby distancing the Project components from passengers traveling along the roadway looking into the site. Additionally, the Project frontage along Valley Center Road is limited to 540 feet, and the length of time that the site would be visible when traveling along the road would therefore be limited, due to posted travel speeds. As mentioned above, the site would further be screened from view from Valley Center Road via proposed landscape screening to be planted adjacent to the roadway within a 20-foot wide landscape zone, consistent with the Valley Center Design Guidelines. As the proposed Project elements (inverter enclosures, PV solar panels) would not exceed 11.5 feet in height, as measured from the ground surface, the Project components would not exceed the height of the proposed landscaping (mature) when viewed from the road, thereby minimizing their visibility within the landscape. Similar to views along Vesper Road, viewer response to improvements made in this area of the Project site are anticipated to be low, due to distance from the roadway, intervening vegetation, and travel speeds.

Furthermore, pedestrians (or other travelers) utilizing the proposed 10-foot wide pathway along Vesper Road would have the potential to experience views into the site, and for a longer period of time, due to the relative travel speed as compared to a car. Users of the pathway along Vesper Road would not generally be afforded views of the Project components, due to the proposal to retain several rows of orange trees along the Project frontage, in combination with the planting of an additional row of orange trees to further screen views; refer to Figure 3C, Conceptual Landscape Plan. Although limited views of the Project elements may occur at a certain angle as one passes by the access drive into the site, such views would be brief, with all

other views into the site along other points along the pathway along the Project frontage being blocked. If constructed in the future, views from a similar pathway constructed along Valley Center Road into the site would be experienced by users of the path; however, due to the proposed landscape screening, the limited height of the Project components, distance to the proposed PV solar panels from the road, and/or the limited length of property frontage along the roadway, views of the Project site for travelers looking to the site from the pathway would be minimized. Viewer response from users of such proposed or future pathways along the Project frontage is therefore considered to be low.

Viewer response from other public vantage points within the valley or from public (or private) roadways or private residences located at a distance and at a higher elevation than the Project site is also anticipated to be low. Views to the Project site from locations within the community would generally be reduced or blocked due to intervening development and minimal differences in elevation (generally flat viewing plane). Viewer response from more distant locations or from locations at a higher elevation would also be low, as the Project would not represent a significant visual feature within the landscape due to distance and other existing vegetation and development along the valley floor.

5.5 Determination of Significance

- 1) Introduction of features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

The Valley Center Design Guidelines (adopted November 1990) identify specific guidelines “used by the County to protect the public welfare and environment,” and to “protect this special environment while accommodating the substantial growth expected in the near future” within the Valley Center community. Specific to the proposed Project, design review is a required step in the development approval process for:

“The following Major Use Permits where they also require the issuance of building permits for the construction or alteration of buildings: ...emergency or utility service facilities and other public buildings not otherwise exempt from local regulation by Federal or State law.”

A discussion of how the Project would conform to specific, applicable design requirements given in the Valley Center Design Guidelines (in addition to the County General Plan Update,

Valley Center Community Plan, and County Zoning Ordinance) is provided in Appendix A, Project Conformance with Applicable Plans, of this report. As appropriate, development projects are evaluated by the Valley Center Design Review Board which acts as an advisory board to the County Department of Planning and Land Use (DPLU).

Location / Lot Size

The Project area is located in the Valley Center area, which is in north-central San Diego County. In the Project vicinity, parcels are generally large-acre parcels with low-density residential and/or agricultural uses; refer to Figure 2, Local Vicinity Map/Key Viewpoint Locations. The majority of surrounding parcels are larger-acre ownerships that support small- and large-scale agricultural operations, some of which have associated single-family residential uses. A number of smaller parcels are located to the north of the Project site, across Vesper Road, and support smaller-scale agricultural operations mixed with single-family residential uses. Smaller lot sizes supporting development at higher densities are evident within the more developed areas of Valley Center.

The Project does not propose to subdivide or change the existing size of the parcel affected by the proposed improvements. Therefore, the Project would not create lot sizes that are inconsistent with the existing visual character of lands in the surrounding area.

Architectural Design

Architectural design of structures within the land areas surrounding the Project is varied, due to a mixture of use types. Residential uses in the area typically exhibit ranch-style features with wooden exteriors and roofing, and generally non-decorative elements. A number of visible residential uses are constructed in the Spanish style, with stucco exteriors, tile roofing, and arched features. Surrounding agricultural and industrial uses generally exhibit more utilitarian features with minimal architectural design.

The Project would involve installation of the PV solar panels, with supporting infrastructure that includes small-scale structures to house the inverter/distributor transformers and switching gear. As the Project represents a utility use, Project components would be utilitarian in nature and would not represent structural features such as residential or commercial buildings that would require detailed architectural design or design features intended for visual enhancement. Architectural design of the proposed facilities is not anticipated to significantly contrast with the visual character of other uses found in the surrounding area. The bulk and mass of the proposed structural elements would reflect similar existing components within the

visual landscape. The architectural design of Project elements would not result in features that are visually dominant within the visual landscape, or that represent a scale that would significantly contrast with the existing visual character.

Materials and Colors

Surrounding land uses exhibit a variety of materials and colors, depending on the land use considered. Materials generally range from wood, stucco, and concrete block for residential and commercial uses. Metal and/or stucco structures are typical of surrounding industrial and agricultural-associated elements. Exterior colors of surrounding structures are typically earthtoned in nature.

Solar Panels

The PV solar panels would be manufactured at an offsite location and transported to the Project site. The panels would be either mono-crystalline or poly-crystalline silicon cell modules and would be black in color and highly absorptive to minimize or the potential for glare and/or reflection of sunlight that may affect views from adjacent or surrounding land uses within the area.

Inverter Enclosures

Approximately seven small-scale, aboveground structures would be constructed within the solar panel fields to weatherize inverter/distributor transformers and switching gear. The structures would be constructed of non-flammable materials (i.e., steel) with an earthtone finish to reflect the visual character of the surrounding natural environment and to reduce the potential for the reflection of sunlight and resulting glare effects to occur.

Overall, the Project would result in the construction of elements within the landscape that would be respective of the existing visual character and visual quality with regard to materials and color. No features are proposed that would sharply visually contrast with surrounding elements, or that would create a visually dominant feature.

Height / Square Footage

Residential and commercial uses on surrounding lands generally range between one to two stories in height. Industrial-type and/or agricultural uses on surrounding lands support structural elements that generally range from 10 to 30 feet in height, with various elements of greater height (e.g. barns, grain storage), depending on their function.

Square footage of buildings in the area varies, due to the type of use, with residential uses generally of smaller scale (generally one to two stories) and industrial and agricultural uses supporting structures of greater square footage.

Solar Panels

The panels would be rack-mounted three-wide, measuring approximately 9.5 feet across each row when flat (horizontal). When fully inclined to 45-degrees, the upper edge of the highest panels would be 8-11.5 feet from the ground surface depending on terrain. When flat all panels would be 4.5-8 feet above the ground surface, depending on terrain; refer to Figure 3B, Major Use Permit Plot Plan – Sheet 2 of 2.

The length of each row of panels would be approximately 150 feet along the north/south axis. Spacing between each row along the vertical axis would be approximately 20 feet.

Due to the limited height of the solar panels and the generally flat topography of the parcel, visibility of the panels within the landscape would be reduced. Although residential land uses are located in the immediate area surrounding the affected parcel, views to the site would generally occur at a distance from developed properties and/or roadways, and views of the panels would therefore be reduced.

Inverter Enclosures

The seven aboveground structures to house the inverter/distributor transformers and switching gear would be approximately 11 feet by 36 feet in size (396 s.f.), and 11 feet in height (10-foot inverter constructed upon a one-foot platform) at the apex. As such, these structures would be relatively small in nature, and would not represent a size or height that would significantly contrast to existing land uses in the surrounding area (i.e., residential, industrial, agricultural uses, etc.).

Bulk and Scale

An evaluation of bulk and scale includes an analysis of the visual appearance of structures, relative to other existing development in the surrounding area. Visual bulk and scale of surrounding structures varies depending on the type of use. Residential uses tend to be of smaller scale (generally one to two stories in height) and visually horizontal in nature, while agricultural and industrial-type uses generally support structural elements of greater bulk and scale within the visual landscape.

It is anticipated that the apparent visual bulk and scale of the proposed Project facilities would generally be consistent with that of surrounding uses, due to the design requirements of the

solar facilities and associated infrastructure, structural/equipment heights, and required development regulations of the applicable zones.

The panels would be rack-mounted three-wide, measuring approximately 9.5 feet across each row when flat (horizontal). When fully inclined to 45-degrees, the upper edge of the highest panels would be 8-11.5 feet from the ground surface depending on terrain. As such, the solar panels would be low-lying and would not be of significant scale. Due to the limited height of the solar panels and the topography of the parcel, visibility of the panels within the landscape would be further reduced.

In addition, the structural elements (inverter enclosures) would be dispersed within the interior of the parcel and would not be visible from adjacent roads or land ownerships. As these facilities would be relatively low-lying within the landscape and limited in height, they are not considered to be of significant scale that would be inconsistent with surrounding land uses or community character. In addition, these elements would total approximately 396 s.f. each and would not be of significant visual bulk, due to their function and utilitarian design.

Building Coverage

Building coverage is generally expressed as a percentage and represents the area of land covered by the footprint of a building. Building coverage is calculated as the building area divided by total lot area. The building footprint does not include paved areas, such as driveways or parking areas or walkways around structures, as defined by Section 1110 of the County Zoning Ordinance.

Many undeveloped lands and lands utilized for agricultural purposes are present in the area surrounding the Project site, and therefore, do not support buildings; refer to Figure 2, Local Vicinity Map/Key Viewpoint Locations. The majority of surrounding developed lands are large-acre parcels with structures of varied square footage, depending on the use (e.g., single-family residential, industrial, agricultural).

The Project includes construction of seven supporting inverter enclosures. Each enclosure (building footprint) would total approximately 396 s.f. overall, or 2,772 s.f. for all seven structures. As the total land area affected would be approximately 46 acres, overall building coverage would be an estimated 0.14 percent (2,272 s.f./2,003,760 s.f.). As such, Project building coverage would represent only a fractional portion of the affected parcel, consistent with the generally rural character of surrounding lands.

The PV solar panels would be rack-mounted three-wide, measuring approximately 9.5 feet across each row when flat (horizontal); refer to Figure 3B, Major Use Permit Plot Plan – Sheet

2 of 2. The solar panels would be aligned in rows that rotate to face east in the morning and west in the afternoon hours, tracking the sun about a north/south axis to maximize solar absorption. The length of each row of panels would be approximately 150 feet along the north/south axis. Although from an aerial perspective, the panels would appear to cover a substantial surface land area, the panels would be mounted on poles, thereby minimizing the footprint, or coverage, of each panel rack.

Glare Effects

Viewers looking to the site from public or private roads or private residential uses at higher elevations than the Project site would have the potential to experience panoramic views of the valley below. As such, the potential for the proposed Project to result in glare effects that would detract from or contrast with the existing visual quality of the area would occur; however, the PV solar panels as proposed would be either mono-crystalline or poly-crystalline silicon cell modules and would be black in color and highly absorptive to minimize the potential for glare and/or reflection of sunlight.

In addition to numerous other technical investigations, in order to evaluate the potential glare/glint effects of solar panels, an investigation was previously conducted by the Federal Aviation Administration (FAA) for the installation of a 4-megawatt PV solar power generation array adjacent to Denver International Airport (DIA) in Colorado in 2006. A number of tests were performed to analyze potential glare effects on the airport (a land use that is highly sensitive to the effects of glint and/or glare) such as placing sample PV solar panels at different installation locations and at variable angles. No glare was noted by observers in any of the panel orientations. An aerial observation was also conducted. Reflectivity of the panels was measured four times per day, concluding that 96 percent of the sun's light was absorbed by the panels, and that the light reflected was dispersed. Since the panels were installed in August 2008, no complaints have been filed with DIA with regard to glare effects from the panels. A similar PV solar panel project was installed on the Express Hub at the Fresno Airport in Fresno, California. The project involved installation of flat plate PV modules and PV modules that capture and concentrate sunlight onto a solar cell which allow only reflected light from heat.

Other similar solar panel projects throughout the U.S. and globally have been installed near airports with no impacts on flight operations with regard to glare. Such locations include the Munich Airport in Germany; the Love Field Airport in Prescott, Arizona; and, the San Francisco, California Airport. Additional PV solar studies considered in this visual analysis for

the proposed Project included the Panoche Valley Solar Farm Project Glint and Glare Study (Panoche Report)¹ and a Technical Memorandum provided by SunPower Corporation, (SunPower Report)², both of which concluded findings of no significant adverse effects with regard to glare generated by PV solar panels.

Based on the above discussion and findings for glare effects of similar solar PV panel installations, potential Project-related glare effects experienced by viewers from area roadways, pedestrian walkways, or other areas frequently used for outdoor activities on surrounding properties are anticipated to be none to minimal, and no significant glare impacts would occur. Based on available technical evidence evaluating the reflectivity of the solar PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare. The proposed Project would be in accordance with the County's Guidelines of Determining Significance for Lighting and Glare.

The appearance of the above-described Project elements within the landscape is not anticipated to significantly detract from or contrast with the existing visual character and/or quality of the surrounding neighborhood, community, or localized area. The location, size, design, and operating characteristics of the proposed use would be compatible with adjacent uses, residents, buildings, and structures with consideration given to harmony in scale, bulk, and coverage.

- 2) Removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.

No onsite or offsite lands affected by the Project support designated landmarks, historic resources, significant trees, or rock outcroppings. Although the Project would result in the installation of the solar panels and associated facilities within the existing landscape, no significant visual resources would be affected by Project construction.

In addition, utility poles/lines are present along Valley Center Road, and replacement or retrofitting of such poles to support the Project is not required or proposed to allow for the transmission of power generated. Therefore, no substantial adverse changes in the existing visual character along this roadway would occur as a result of Project implementation.

¹ Panoche Valley Solar Farm Project Glint and Glare Report, prepared by Power Engineers, May 10, 2010.

² SunPower Corporation Technical Notification #T09014, Solar Module Glare and Reflectance, dated September 29, 2009.

The Project site is designated as a civic use type. The proposed use is allowed under the existing General Plan land use and zoning designations with County approval of a MUP, and is therefore consistent with the land use intended for the property by the County. Although development of the site with the proposed PV solar facilities would change the onsite use from agriculture to a utility use, design measures are proposed (distancing the facilities from the roadways, landscape screening, Project elements of minimal height and scale, etc.), to ensure that the Project does not result in a significant effect on the existing visual setting and that the rural character or image of the neighborhood is not adversely altered with Project implementation.

As such, the Project as proposed would not result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area. Impacts would be less than significant, and no mitigation is required.

- 3) Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, a trail within an adopted County or State trail system, a scenic vista or highway, or a recreational area.

Project construction activities (i.e., construction vehicles, equipment to be installed, etc.) would be temporarily visible on the Project properties themselves and along the proposed transmission alignments; however, the identified sites occur within a rural environment, with limited visual resources. Construction activities may be somewhat visible from area roadways and adjoining properties; however, such effects would be temporary and would cease upon completion of construction.

The proposed facilities would be constructed on disturbed/developed lands that support residential and agricultural uses. Land uses within the surrounding area include industrial-type and agricultural-type uses. As stated above, the site is located within the valley and is therefore generally blocked from view from surrounding public roadways and privately-owned properties, due to the relatively level topography. As one moves further from the site on public or private roadways or private residences located at a higher elevation along the surrounding hillsides, views to the site may occur; however, such views would be distanced from the Project site, and the visibility of the proposed facilities would be diminished within the surrounding landscape; refer also to Figure 13, View 3 (Visual Simulation) – View from Coolwater Ranch Lane. Additionally, existing development and established vegetation would further reduce or restrict views to the site. The proposed landscape screening along Vesper Road and Valley Center Road would further blend the development into the surrounding visual setting and reflect the character of other developed parcels along the valley floor, thereby reducing the visibility of the Project. Therefore, views from private residences or private or public roadways

located at a higher elevation than the Project are not anticipated to be substantially obstructed, interrupted, or detracted from as a result of Project implementation.

As stated previously, panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Energy generated by the Project would be delivered underground to an existing 12 kV distribution line that runs parallel to Valley Center Road; refer to Figure 3A, Major Use Permit Plot Plan (Sheet 1 of 2). Connection would be made from the Project site via trench or boring under Valley Center Road. The proposed underground connection would be consistent with the San Diego General Plan Update requirement for new development to place underground utilities to “maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.” Undergrounding of the utility lines would further reduce potential Project impacts on the existing visual setting.

As identified previously, two County-designated Scenic Highways are located within the vicinity of the Project site: Lilac Road/Valley Center Road (S6) from State Route 76 to State Route 76, adjacent to the Project site, and Lake Wohlford Road from Valley Center Road east (Escondido City limits) to Valley Center Road (excluding the portion within City of Escondido), approximately 1.5 miles east of the Project site.

The only portion of the Lake Wohlford Road segment that could potentially be visible from the Project site would be the intersection of Lake Wohlford and Valley Center Road; however, the flat terrain and mature vegetation within the valley would otherwise obscure views to the Project site. Additionally, due to distance from the site and intervening topography and development, views of the Project from this roadway would be diminished, and the Project would not substantially detract from or interrupt existing views.

As stated previously, views into the site from Valley Center Road would occur as one travels east-west along the Project frontage. Viewer response to Project-related facilities along Valley Center Road is also anticipated to be low. The PV solar facilities installed in this portion of the site would be located approximately 116 feet from the edge of pavement (at the closest point), thereby distancing the Project components from passengers traveling along the roadway looking into the site. Additionally, the Project frontage along Valley Center Road is limited to 540 feet, and the length of time that the site would be visible when traveling along the road would therefore be limited, due to posted travel speeds. As mentioned above, the site would further be screened from view from Valley Center Road via proposed landscape screening to be planted within the 20-foot wide zone, consistent with Valley Center Design Guidelines. As the proposed Project elements (inverter enclosures, PV solar panels) would not exceed 11.5 feet in

height, as measured from the ground surface, the Project components would not exceed the height of the proposed landscaping (mature) when viewed from the road, thereby minimizing their visibility within the landscape. Therefore, the Project is not anticipated to substantially obstruct, interrupt, or detract from a valued focal vista from a scenic highway. The Project as designed would provide for construction of a 10-foot wide pathway along the southern side of Vesper, consistent with County requirements and the Valley Center Community Trails and Pathways Plan. The pathway would be dedicated to the County for long-term management and to allow for public recreational use. Users of the proposed 10-foot wide pathway along Vesper Road would have the potential to experience views into the site; however, views of the Project components would not generally be afforded, due to the Project design which would retain several rows of orange trees along the Project frontage, in addition to planting an additional row of orange trees to further restrict such views. Although limited views of the Project elements may occur at a certain angle as one passes by the access drive into the site, such views would be brief, with all other views into the site along other points along the pathway along the Project frontage being minimized or blocked by the orchard. Additionally, if constructed in the future by the County, views into the site from a similar pathway constructed along Valley Center Road would be experienced by users of the path; however, due to the proposed landscape screening, the limited height of the Project components, distance to the proposed PV solar panels from the road, and/or the limited length of property frontage along the roadway, views of the Project site for travelers looking to the site from the pathway would be minimized. Therefore, it is not anticipated that the Project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from an adopted (future) trail within the County's trail system.

Additionally, views may occur from public trails within the Hell Hole Canyon County Preserve located to the north/northeast or other such trails that occur along the various mountain ranges that rise from the valley floor; however, such views would be intermittent and would vary due to the viewer's location. As the Preserve is located approximately one mile from the Project site, the proposed facilities are not anticipated to significantly detract from or interrupt existing views from any public trails within the Preserve. Any potential views of the Project site from such trails would occur at a distance, thereby reducing the visibility of the proposed facilities. In addition, views to the site from such trails would likely be intermittent due to topography as well as intervening vegetation along the trails. With consideration for distance to the Project site and the limited size (height) of the panels, along with other built elements visible within the landscape, the visual effect of the Project would be minimal, and views would not be significantly changed with Project implementation.

With consideration for the limited size (height) of the panels, along with other built elements visible within the landscape of the valley floor, the visual effect of the Project would be minimal and views would not be significantly changed with Project implementation. As such, it is not anticipated that the Project will substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road or a scenic vista or highway. In addition, views from established public recreational areas or trails would not be substantially obstructed or interrupted with development of the site as proposed. Therefore, impacts would be less than significant, and no mitigation is required.

- 4) The project would not comply with applicable goals, policies or requirements of an applicable County Community Plan, Subregional Plan, or Historic District's zoning.

The Project as proposed has been designed to be consistent with all applicable goals, policies and requirements of the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, and the County Zoning Ordinance; refer to Appendix A, Project Conformance with Applicable Plans, which provides a discussion of Project conformance with these documents, as appropriate. The Project is not within a Historic District, and is therefore, not affected by such a plan. As such, Project impacts with regard to the significance criteria would be less than significant, and no mitigation is required.

5.6 Cumulative Impact Analysis

Figure 14, Discretionary Permits, identifies the projects considered for the cumulative analysis. The study area selected for the Project generally includes those lands within proximity to properties affected by the Project. A list of projects considered for the cumulative analysis is included in Table 5, Cumulative Projects, below.

The cumulative study area was determined based upon the surrounding topography and potential views to the site from offsite public locations. The study area limits generally encompass the surrounding ridgelines with consideration for distance from the Project site. Viewers located on the downslopes away from the Project site would not have views of the Project. Additionally, locations within the valley on the lower slopes may have views to the site, but such views would be decreased by distance and intervening geologic conditions, as well as existing development and established vegetation. Table 5 reflects the current discretionary projects identified by the County of San Diego Department of Land Use for the Valley Center area.

**TABLE 5
CUMULATIVE PROJECTS**

Number*	Project Name
	Sol Orchard LLC – Valley Center PV Solar Farm (Proposed Project)
5173	Spanish Trails (Loranda)
09-002	Spanish Trails (Loranda)
06-007	Alti, GPA, RES
5551	Alti, Butterfield Trails
08-028	Alti, GPA, RES
09-003	Weston-Valley Center PAA
09-004	Valley Center North Village Sewer Plan

* Project number refers to location as shown on Figure 14, Discretionary Permits.

Construction of currently approved and pending projects in the Project vicinity would permanently alter the nature and appearance of the area as future development occurs over upcoming years. Gradual buildout of the projects considered in the cumulative analysis would result in a change in the existing conditions over time; however, the change would not result in a significant impact as it would not substantially alter the overall visual landscape of the valley.

It is anticipated that future construction activities within the cumulative study area would occur on various sites and at varied times, when an application for development is made. Such construction-related impacts would be short-term and would cease upon completion. In addition, all new development projects within the cumulative study area would be subject to additional environmental and design review on a site-specific, project-by-project basis to ensure visual aesthetic impacts are limited to the extent possible during the construction process. All future construction activities would be required to be consistent with the County's regulatory requirements and applicable conditions of approval to reduce potential cumulative effects of construction to less than significant.

In addition, future development of the cumulative projects in the Project vicinity could permanently convert existing offsite open space or undeveloped lands to developed lands, potentially resulting in the incremental loss of visible open space within the Valley Center community. Such future development could also contribute to the alteration of views to designated visual resources. All future development within the Valley Center community would be subject to an evaluation of the significance of potential cumulative visual and aesthetic changes on a site-specific, project-by-project basis, with consideration for its scope and contribution to a change in the overall visual pattern or character within the community.

The cumulative projects considered for the Visual Analysis are located throughout the Valley Center area; refer to Figure 14, Discretionary Permits. All but two of the projects identified are located outside of the study area, due to area topography.

None of the projects proposed include development of solar energy facilities, and therefore, would not contribute to a cumulative condition with regard to such development along the valley floor. As the Valley Center area offers an environment with abundant sunshine, combined with available undeveloped lands that are generally flat, the area represents optimal conditions for the sighting of solar energy facilities in the future. If proposed, it is anticipated that any future installation of solar panels along the valley floor would occur sporadically on available parcels as independent development applications, rather than concentrated in one large area of the valley. Thus, the cumulative visual effects of such installations would be reduced, as a range of small-scale to larger-scale projects would likely be proposed, depending on available land, proper zoning, and the nature of the applicant. In addition, potential glare impacts on a cumulative level as the result of other solar energy facilities locating within the Valley Center area would be less than significant. As all solar panels are designed to absorb sunlight, potential glare effects from future additional solar installations would not create significant glare or reflective surfaces that would create adverse effects on surrounding land uses or on views from surrounding vantage points.

Future development along the valley floor would have a similar visual effect as other types of development would have in that they would generally change undeveloped land to developed land. Over time, it is anticipated that development within the Valley Center area will continue to occur.

As the valley floor is extensive, and the proposed Project site represents a minimal overall percentage of such lands, the proposed development is not expected to result in a significant visual change in the appearance of the valley floor when viewed from higher elevations. In addition, due to the limited height and scale of the proposed Project elements, the Project is not anticipated to contribute to a significant cumulative impact on existing views from locations within the valley, as such views would be restricted by relatively flat topography, and intervening development and vegetation.

Assuming a complete buildout of all the projects considered for the cumulative analysis, potential aesthetic cumulative impacts are considered to be less than significant for the following reasons:

The projects would not result in the introduction of feature that would detract or contrast with the existing visual features of the surrounding area. Existing development in the Valley Center

area consists of a range of uses that include agricultural uses, commercial uses, industrial uses, and residential uses. Development of the proposed Project in the land use mix would not conflict with the visual quality of the area because the development would be spread out and not concentrated in one area. These projects would not disrupt the pattern of development adjacent to existing homes or businesses, and would not conflict with specific design guidelines or specific thematic development requirements in the area.

The addition of the cumulative projects would not remove or create a substantial adverse change to the features that represent a valued visual resource in the area. The valley floor would still be visible from higher elevations and would still appear to have a scattered development pattern once the cumulative projects are constructed. None of the projects are anticipated to significantly alter the mountain views from the valley floor from places where they are currently observed. The cumulative projects would not remove or replace any local or State designated landmarks.

The proposed Project would not substantially obstruct or detract from valued lookouts or panoramic views from public roads, scenic highways, or recreational areas. Buildout of the cumulative projects would not have an adverse effect on these public viewsheds because the projects would match the existing development pattern in the valley.

Moreover, the cumulative projects would be required to comply with applicable goals and policies of the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, and County Zoning Ordinance. Although one of the projects identified proposes a rezone and General Plan Amendment, this project is located outside of the study area and is not considered to have the potential to contribute to a cumulative visual effect with respect for the proposed Project. Additionally, specific analysis to demonstrate the compatibility of this project would be required prior to its approval by the County.

In addition, all lighting proposed with future development within the cumulative study area, such as street lighting, security lighting, or exterior illumination, would potentially result in increased light and glare impacts within the Valley Center community. Projects within the cumulative study area would be evaluated by the County and the Valley Center Community Planning Group on a project-by-project basis to determine the extent of such lighting necessary and any appropriate site-specific measures to reduce potential impacts on surrounding areas (i.e., shielding, use of low-level lighting, directing lighting away from adjacent properties and open space areas). As such, it is anticipated that the cumulative effects of increased lighting and/or glare associated with future development in the cumulative study area would be reduced to less than significant levels. As the Project would require minimal lighting for the

purposes of security and maintenance, the Project would not contribute to significant cumulative impacts relative to light and/or glare. Impacts in this regard would be less than significant.

All future development within the Valley Center community would be subject to an evaluation of the significance of potential cumulative visual and aesthetic changes on a site-specific, project-by-project basis, with consideration for its scope and contribution to a change in the overall visual pattern or character within the community. Adherence to applicable General Plan policies and goals and applicable County Design Standards (e.g. Valley Center Design Guidelines) would further reduce potential cumulative impacts relative to the long-term alteration of views to designated scenic resources. Although the Project would result in a permanent visual change in the existing landscape with development of the proposed PV solar farm, as demonstrated by evaluation of the visual simulations prepared, the Project is not considered to contribute to a significant cumulative effect with regard to the loss of views to scenic resources.

5.7 Summary of Project Impacts and Significance and Conclusions

The Visual Analysis was prepared to provide an evaluation of potential Project impacts on existing visual resources and character of the surrounding community of Valley Center, California. With regard to visual resources, the Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the surrounding community by conflicting with visual elements or quality of an existing area (i.e., through conflicting style, size, coverage, scale, building materials, etc.). The Project would not result in the removal of or substantial adverse change to one or more features that contribute to the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area. The Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, or County Zoning Ordinance.

For the above reasons, it was determined that the Project would not result in potentially significant impacts on visual resources in the Valley Center community. As such, no mitigation measures are required or proposed.

6.0 Visual Mitigation Measures / Design Considerations

6.1 Visual Impact Analysis

The Project would not result in the introduction of features that would significantly detract from or contrast with the visual character of the Valley Center community by conflicting with visual elements or quality of an existing area. In addition, the Project would not result in the removal of or substantial adverse change of one or more features that contribute to the valued visual character or image of the Project area, including but not limited to designated landmarks, historic resources, trees, or rock outcroppings. Furthermore, the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a public road, trails within an adopted County or State trail system, scenic vista or highway, or recreational area. The Project as designed would also not result in an inconsistency with any goals, standards, or policies related to visual resources as given in the County General Plan, Valley Center Community Plan, Valley Center Design Guidelines, or other applicable regulations and ordinances.

Design measures contributing to reduced visibility of the Project facilities within the landscape include an approximate 120-foot setback of the development area from the property boundary. In addition, the proposed Project design includes landscape screening along Vesper Road, Valley Center Road, and portions of the property boundary where adjacent to residential or other potentially sensitive uses. Furthermore, onsite structures (inverter enclosures) would include an exterior surface that is earth-toned to blend the components into the visual landscape. Access to the parcel would be provided through a secured gate and identified by minimal signage, rather than decorative or otherwise highly visible design features. Although the Project would change the visual character of the affected parcel, the proposed facilities would be consistent with development intended for the properties as indicated by the existing General Plan land use and zoning designations, and would be visually compatible with other existing uses in the surrounding area which support structural elements or design characteristics (i.e. materials, colors, scale, mass, height, etc.) greater than or similar to that associated with the Project.

Through this Visual Resources/Aesthetics Analysis, potential effects of the PV Solar Farm Project were evaluated against the thresholds of significance developed by the County of San

Diego. The Project is considered to be compatible with the existing character of the surrounding Valley Center community and would be consistent with applicable County and community land use and design regulations with regard to visual and aesthetic resources. No significant impacts were identified with regard to visual/aesthetic resources. As such, Project impacts would be less than significant, and no mitigation measures are required or proposed.

7.0 References

County of San Diego General Plan.

County of San Diego General Plan Update.

County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources. July 30, 2007.

County of San Diego Zoning Ordinance. Updated with Ordinance Update No. 80, October 2009.

County of San Diego Wildland Urban Interface Ordinance. Ordinance No. 9670.

Panoche Valley Solar Farm Project Glint and Glare Report, prepared by Power Engineers, May 10, 2010.

SunPower Corporation Technical Notification #T09014, Solar Module Glare and Reflectance, dated September 29, 2009.

Valley Center Community Plan (Part II). Amended April 17, 2002.

Valley Center Design Guidelines. Approved May 7, 1986. Revised November 7, 1990.

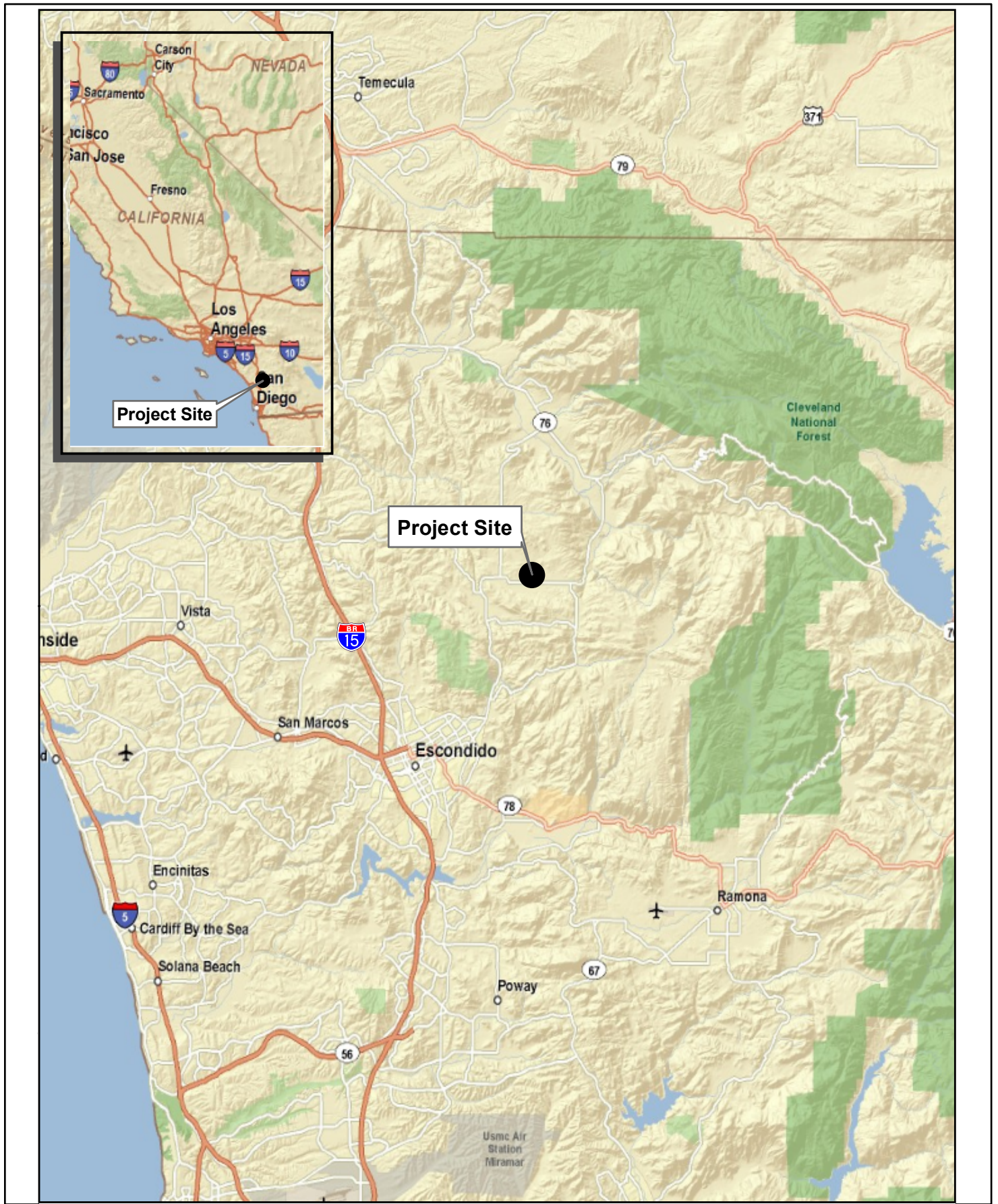
8.0 Report Preparers

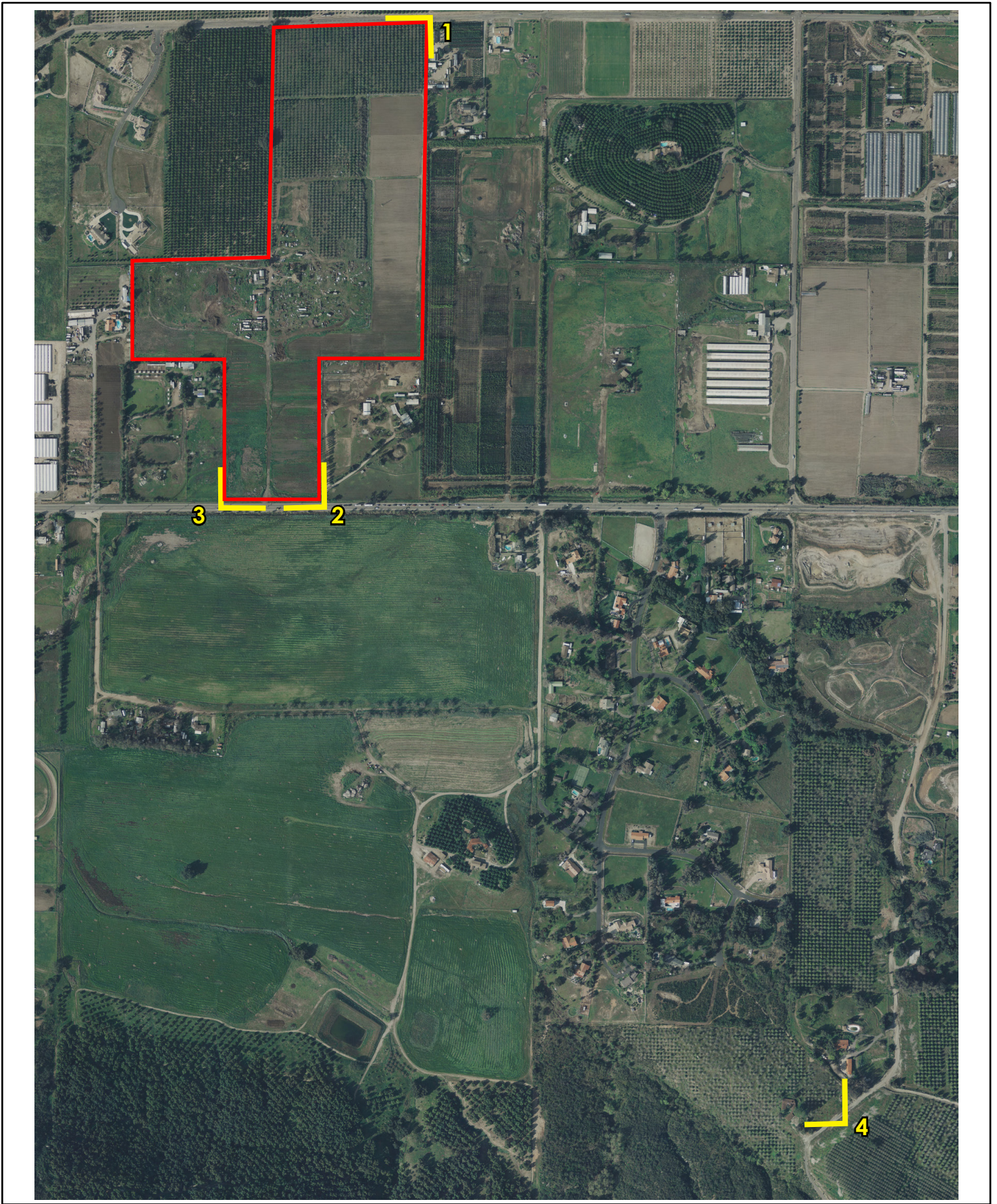
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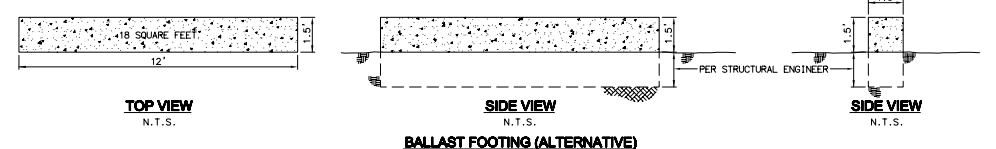
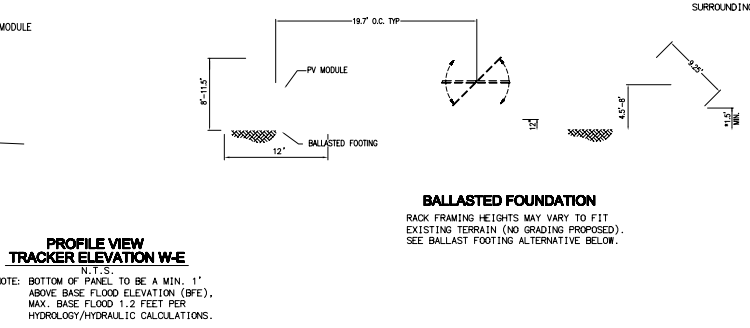
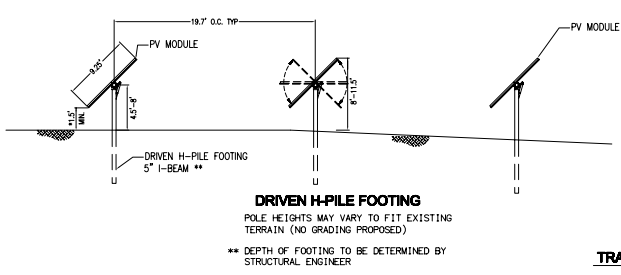
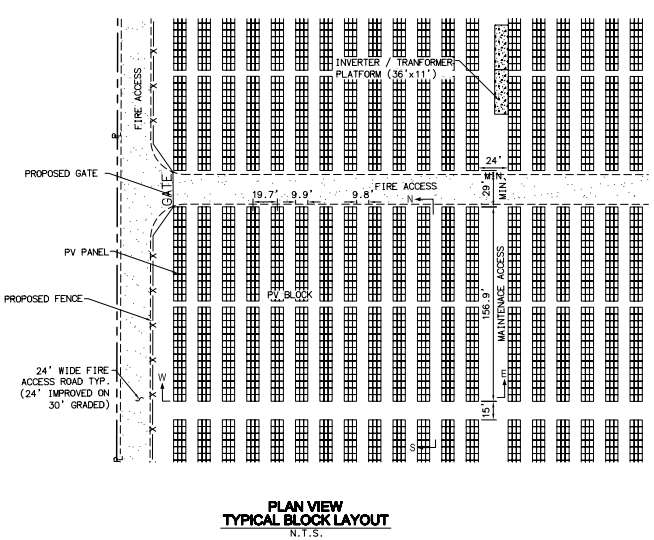
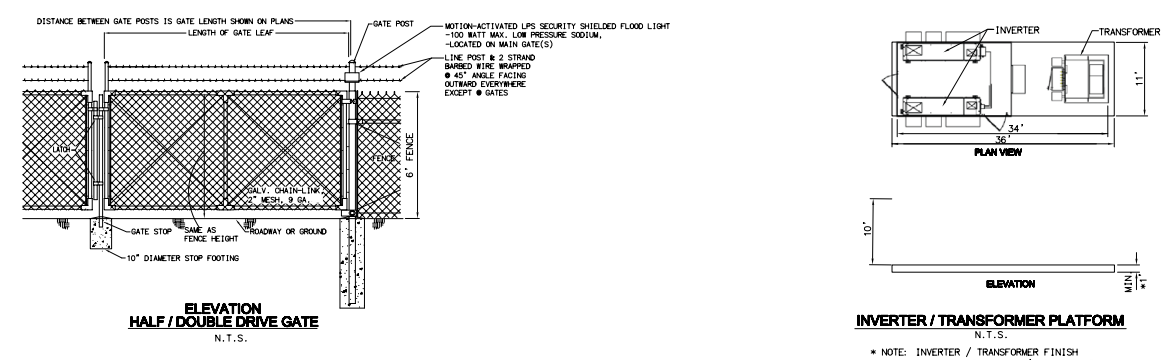
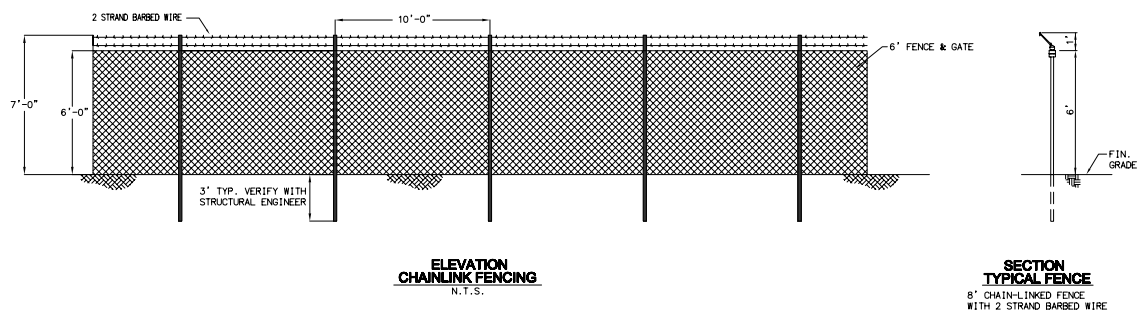
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Senior Environmental Planner
Primary Author of Visual Impact Analysis

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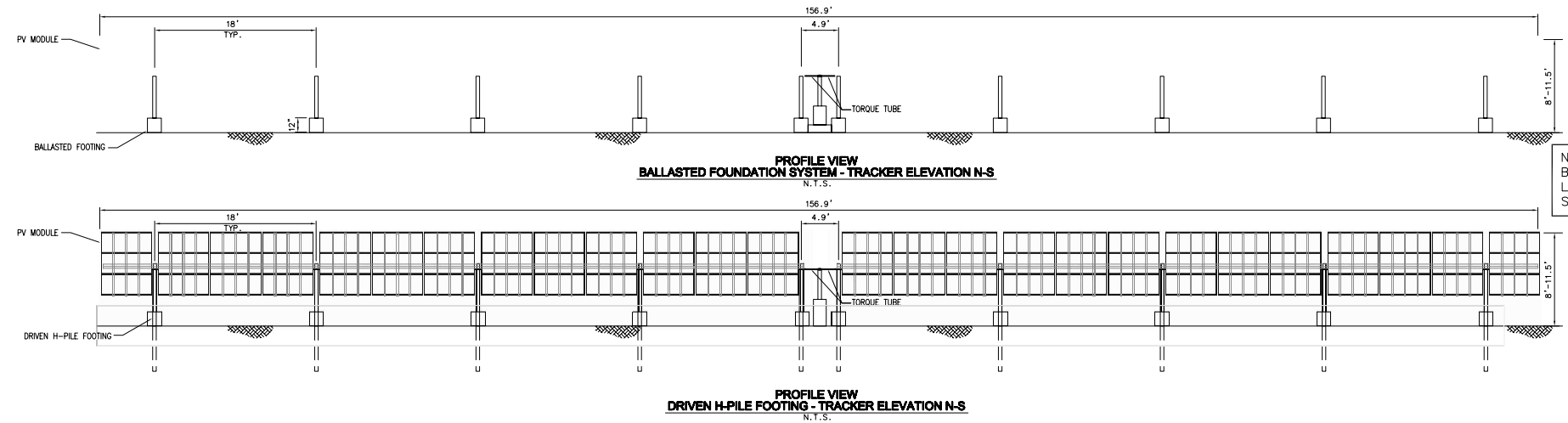






BALLAST FOOTING (ALTERNATIVE)
N.T.S.

THE PROJECT'S STRUCTURAL ENGINEER, BASED ON EXISTING FIELD AND SOILS CONDITIONS, MAY RECOMMEND THE USE OF BALLASTED FOOTINGS IN LIEU OF THE TYPICAL DRIVEN H-PILE FOOTINGS. USE OF THE BALLASTED FOOTINGS IS LIMITED TO 10% (40%) OF THE TOTAL NUMBER OF FOOTINGS. INDIVIDUAL OR SERIES OF BALLASTED FOOTINGS MAY BE INTERSPERSED WITHIN ROWS OF TYPICAL DRIVEN H-PILE FOOTINGS. SPACING OF BALLASTED FOOTINGS WILL MATCH INTERVALS AS SHOWN FOR THE TYPICAL DRIVEN H-PILE FOOTINGS.

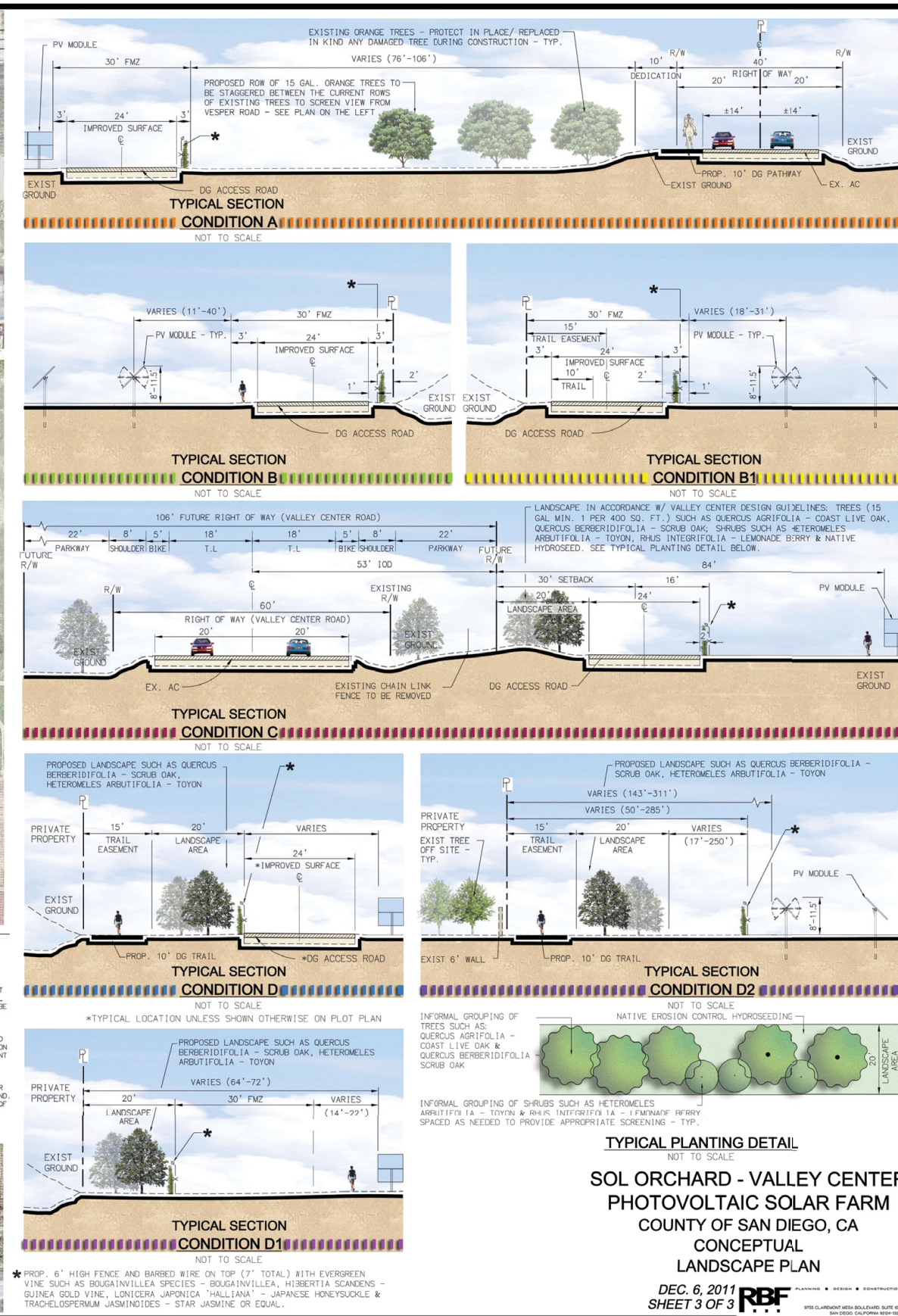
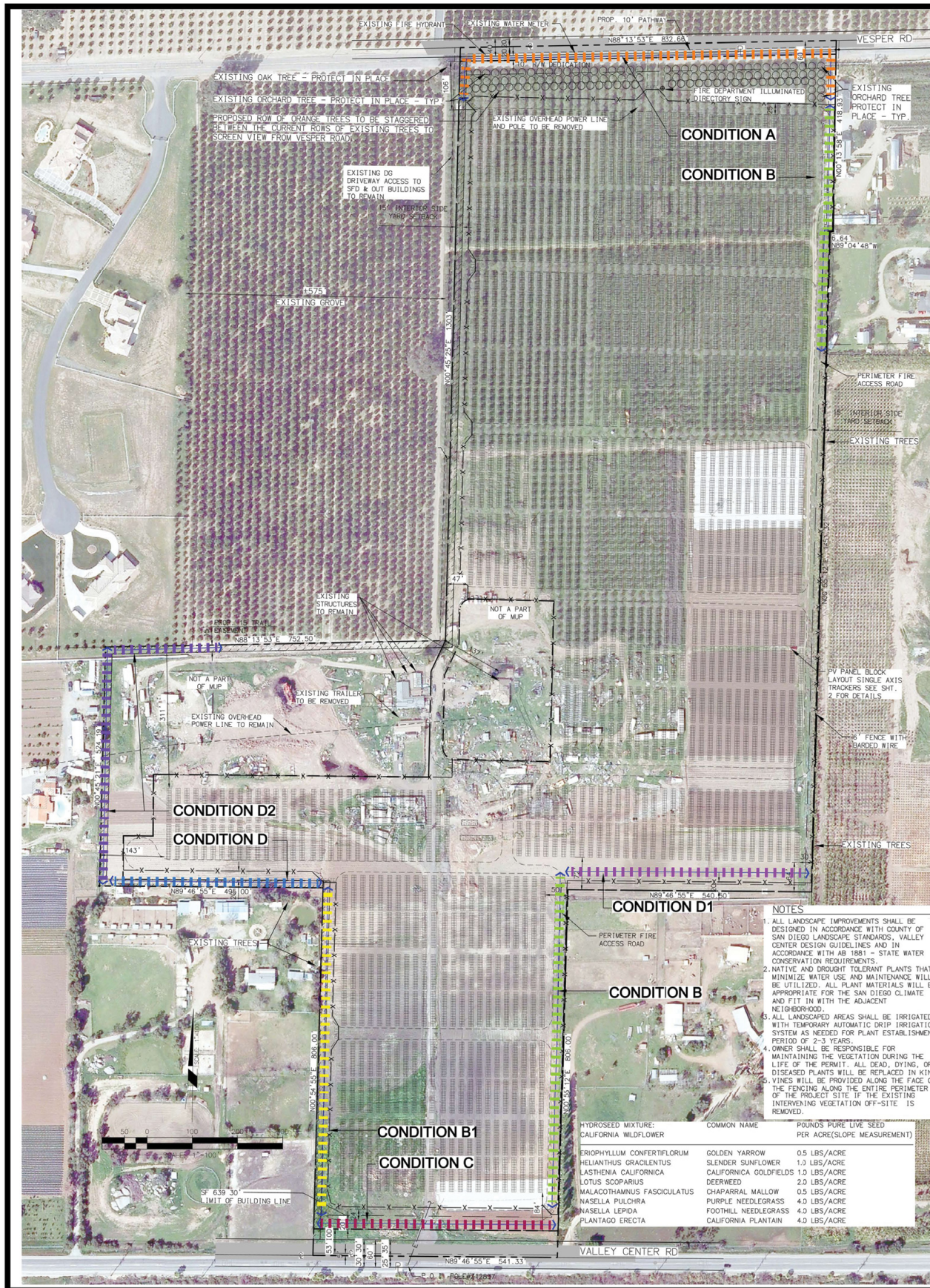


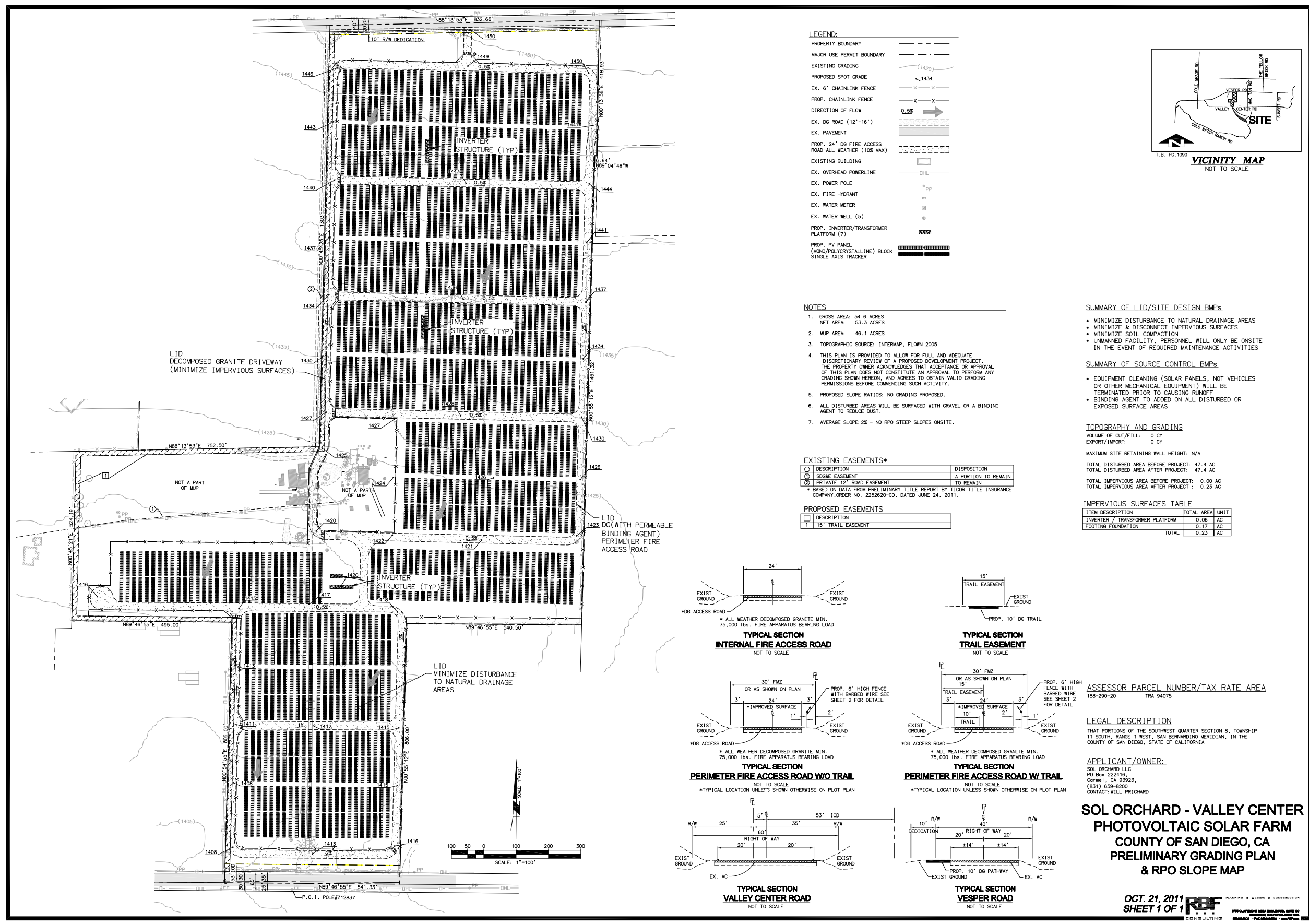
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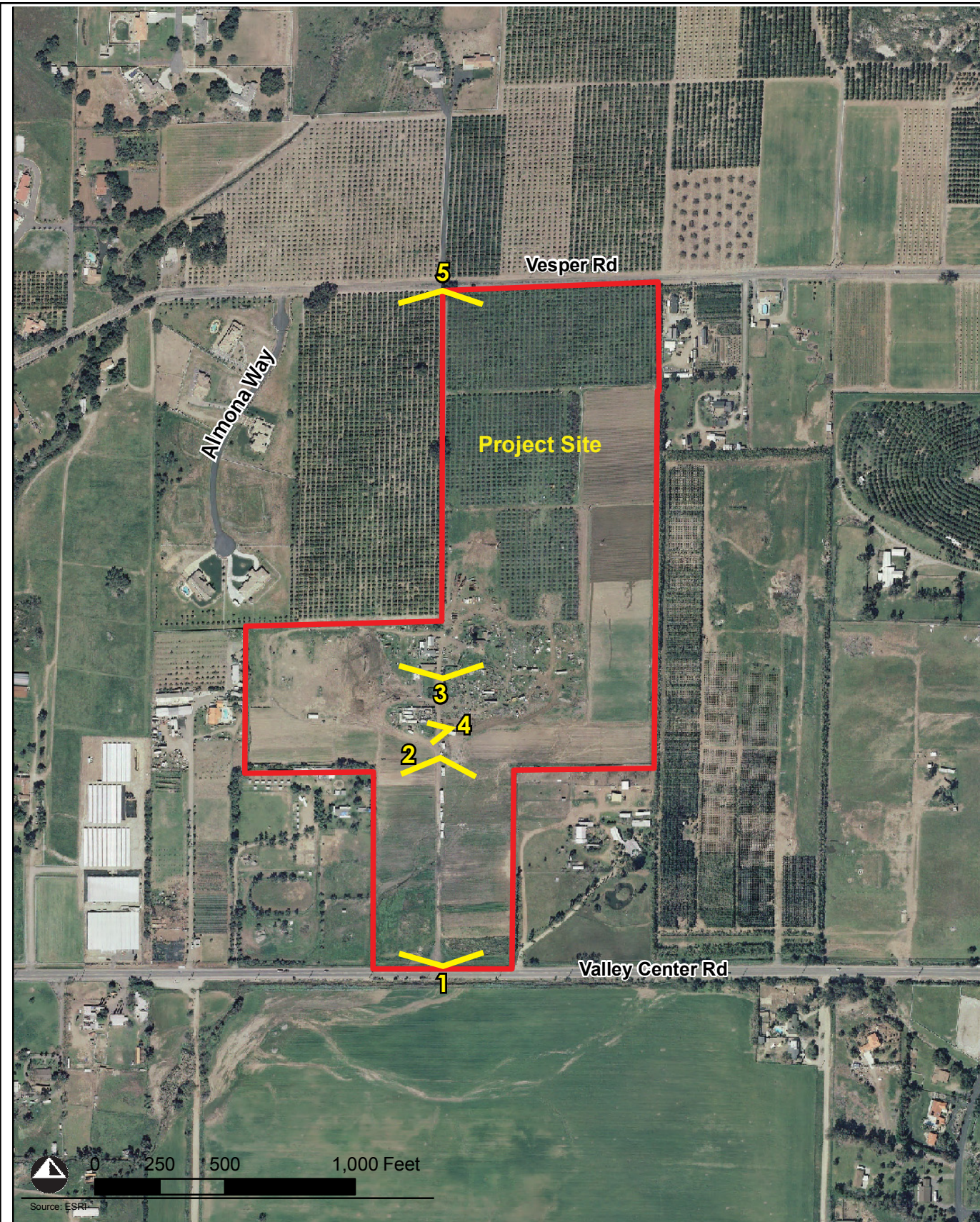
SOL ORCHARD - VALLEY CENTER PHOTOVOLTAIC SOLAR FARM
COUNTY OF SAN DIEGO, CA
MAJOR USE PERMIT

ELEVATIONS/DETAILS
DEC. 6, 2011
SHEET 2 OF 3
RBF CONSULTING

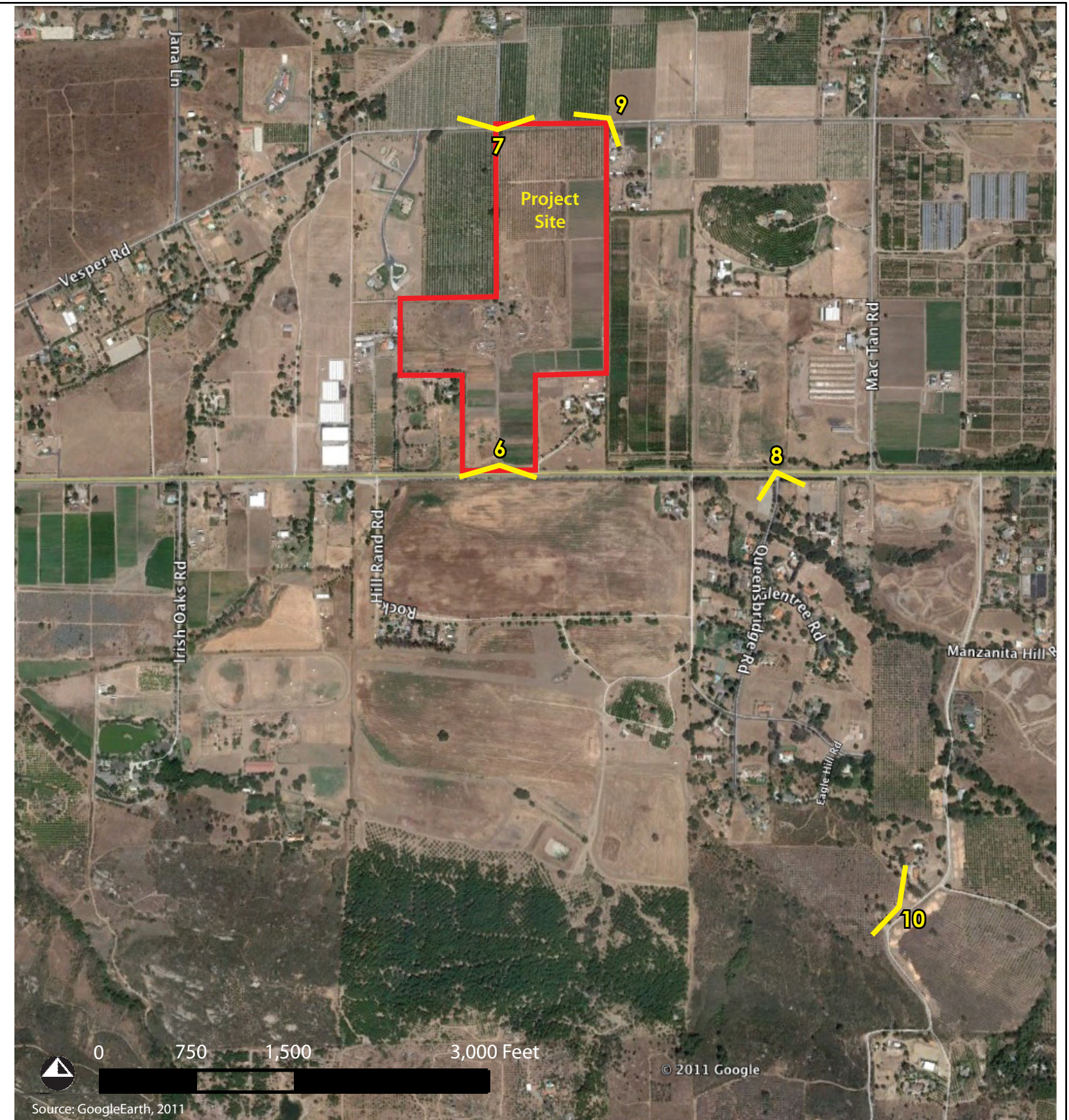








ONSITE PHOTOGRAPHS



OFFSITE PHOTOGRAPHS



Photo 1: View looking north into Project Site from (near) Valley Center Road



Photo 2: View looking south to Valley Center Road



Photo 3: View looking north from developed/disturbed area in central portion of Project site



Photo 4: View looking west from developed/disturbed area in central portion of Project Site



Photo 5: View looking south into Project Site from northwest corner of property along Vesper Road



Photo 6: View looking south across Valley Center Road from southern Project boundary



Photo 7: View looking north across Vesper Road from northern Project boundary



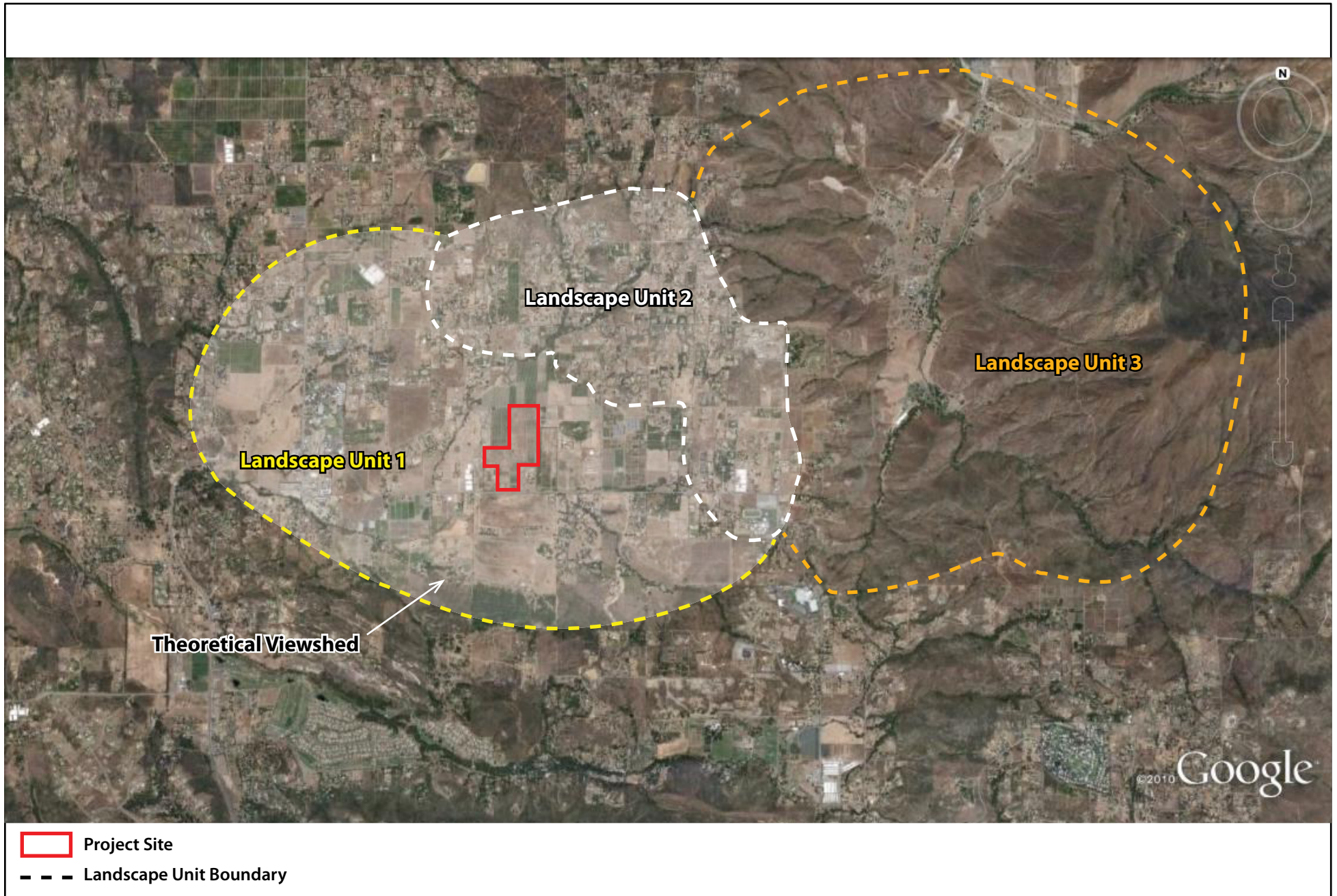
Photo 8: Valley Center Estates located to southeast of Project Site along Valley Center Road



Photo 9: View looking east-west along Vesper Road from adjacent property to the east



Photo 10: View looking northwest to Project from the south





View 1A - Existing View Looking Southwest to Project Site from Vesper Road



View 1B - Proposed View Looking Southwest to Project Site from Vesper Road



View 2A - Existing View Looking Northwest to Project Site from Valley Center Road



View 2B - Proposed View Looking Northwest to Project Site from Valley Center Road



View 3A - Existing View Looking Northeast to Project Site from Valley Center Road



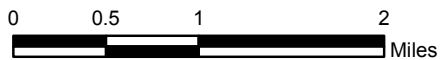
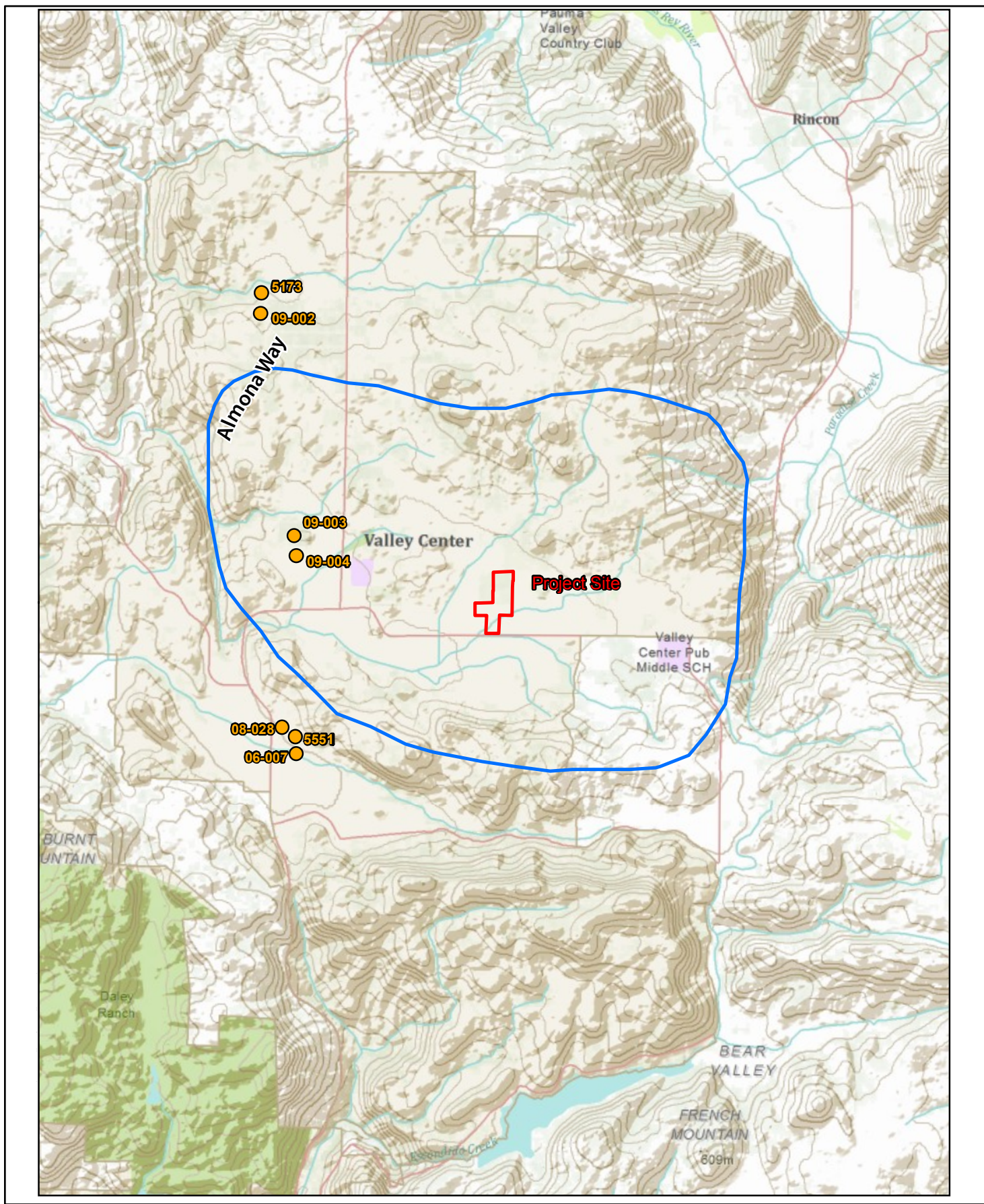
View 3B - Proposed View Looking Northeast to Project Site from Valley Center Road



View 4A - Existing View Looking Northwest to Project Site from Coolwater Ranch Lane



View 4B - Proposed View Looking Northwest to Project Site from Coolwater Ranch Lane



APPENDIX A: PROJECT CONFORMANCE WITH APPLICABLE PLANS

PHOTOVOLTAIC SOLAR FARM
Valley Center, California
Visual Resources / Aesthetics Impact Analysis
December 2011

Sol Orchard – Valley Center

Project Conformance with Applicable Plans

County of San Diego General Plan Update

The County of San Diego General Plan Update (adopted August 3, 2011) is intended to provide guidance for the long-term development of San Diego County. The General Plan Update includes various Elements that provide guidance for accommodating future growth while retaining or enhancing the County's rural character, its economy, its environmental resources, and its unique communities. Goals, policies and objectives are provided within each of the Elements to guide future land development and ensure consistency with the County's intended vision for the future of San Diego County. The Guiding Principles of the General Plan Update are to:

- ∞ Support a reasonable share of projected regional population growth;
- ∞ Promote health and sustainability by locating new growth near existing and planned infrastructure, services, and jobs in a compact pattern of development;
- ∞ Reinforce the vitality, local economy, and individual character of existing communities when planning new housing, employment, and recreational opportunities;
- ∞ Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County's character and ecological importance;
- ∞ Ensure that development accounts for physical constraints and the natural hazards of the land;
- ∞ Provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns and, when appropriate, plan for development which supports public transportation;
- ∞ Maintain environmentally sustainable communities and reduce greenhouse gas emissions that contribute to climate change;
- ∞ Preserve agriculture as an integral component of the region's economy, character, and open space network;
- ∞ Minimize public costs of infrastructure and services and correlate their timing with new development; and,
- ∞ Recognize community and stakeholder interests while striving for consensus.

Chapter 3 - Land Use Element

Planning for Sustainability

Policies

- ∞ **LU-6.9 Development Conformance with Topography.** Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and, to utilize natural drainage and topography in conveying storm water to the maximum extent practicable.

Although the majority of land surface in the MUP area is flat, portions would be cleared and grubbed to allow for installation of the panels and associated facilities. No onsite or offsite grading is proposed. Therefore, the topography of the site would largely remain in its natural state.

A significant increase in storm water runoff or treatment needs from the areas affected by the Project is not anticipated to occur. Storm water runoff in areas where facilities would be installed would remain generally unchanged following construction. In addition, the solar panels and supporting structures would occupy a minimal building footprint on the affected properties and would not require or result in a significant change in existing conditions with regard to storm water runoff or treatment needs. As applicable, storm water runoff and treatment would be adequately handled through the implementation of onsite best management practices (BMPs) and/or other design measures and would not result in or require significant changes to existing offsite storm drain facilities.

Semi-Rural/Rural Lands

Policies

- ∞ **LU-10.2 Development - Environmental Resource Relationship.** Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character and avoid sensitive or intact environmental resources and hazard areas.

The Project site has a County Regional Category designation of Semi-Rural Residential. The Project has been designed to avoid or minimize potential impacts to natural resources and largely conserve the natural onsite topography through the avoidance of grading. Project components have been designed to minimize potential effects on the existing visual landscape with regard to height and scale, as well as overall visibility, as the Project proposes vegetative screening to reduce views into the site and reflect the rural character of the area. No hazardous areas have been identified on the site that would interfere with the proposed development.

GOAL LU-12

Infrastructure and Services Supporting Development.

Policies

- ∞ **LU-12.4 Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.

The proposed PV solar facility would be allowed under the existing General Plan and zoning designations with County approval of a MUP and is therefore consistent with the County's intended use for the property. The Project has been designed to minimize environmental impacts through site design measures, and all impacts identified can be reduced to less than significant through the implementation of mitigation measures (e.g. biological resources). Additionally, the Project is not located within a preserve area. The Project has also been designed to minimize potential visual effects with regard to height and scale, and vegetative screening is proposed along the perimeter where appropriate to reduce public views into the site, particularly from Valley Center Road (County Highway S6) which is designated as a County Scenic Highway.

Chapter 5 – Conservation and Open Space Element

Visual Resources

Goal COS-11

- ∞ **Preservation of Scenic Resources.** Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

As stated above, Valley Center Road is designated as a County Scenic Highway and is therefore considered to offer value as a scenic resource. The Project design does not propose the removal of any trees with development of the site, including two mature oak trees located adjacent to Vesper Road. Additionally, the PV solar panels would be set back from the edge of pavement by approximately 120 feet along both Valley Center Road and Vesper Road. A 20-foot wide landscaped buffer would be provided along Valley Center Road to screen views

into the site. Additionally, the Project proposes to retain several rows of existing citrus (orange) trees (and the planting of additional trees for visual screening purposes) along Vesper Road to maintain and enhance the rural character of the site within the landscape. The visibility of the Project components would also be reduced through Project design to minimize the height and scale of the Project components, and by providing vegetative screening along the Project boundary where views of the Project components may occur from offsite public and private lands.

Policies

- ✎ **COS-11.1 Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- ✎ **COS-11.2 Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

No regionally significant vistas, prominent ridgelines, dominant landforms, or reservoirs are present on the Project site. No regionally significant natural features, designated historic landmarks, or points of regional historic or cultural interest occur onsite; however, the Project is located adjacent to Valley Center Road which is designated as a County Scenic Highway having scenic value. The Project has been designed to minimize visual impacts on the this roadway by distancing the development from the road and providing landscape screening to reduce views into the site, consistent with the Valley Center Design Guidelines and applicable County roadway design measures.

The Project as designed would provide for construction of a 10-foot wide pathway along the southern side of Vesper Road, consistent with County requirements and the Valley Center Community Trails and Pathways Plan. The pathway would be constructed to the satisfaction of the County of San Diego, Director of Public Works and Director of Parks and Recreation. The pathway would be constructed along the Project frontage within the right-of-way as a condition of Project approval and would be dedicated to the County for long-term management and to allow for public recreational use. A trail would also be constructed along the west side of the Project site to provide a direct north/south connection between Vesper Road and Valley Center Road. The trail would consist of a 10-foot wide trail within a 15-foot easement.

- ✎ **COS-11.3 Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning;

- Integration of natural features into the project;
- Appropriate scale, materials, and design to complement the surrounding natural landscape;
- Minimal disturbance of topography;
- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character; and,
- Creation of contiguous open space networks.

Implementation of the proposed Project would not require grading, thereby minimizing potential impacts to the natural onsite topography and largely maintaining the natural character of the physical underlying ground surface.

As stated previously, the Project components as proposed are of relatively limited height and scale in order to minimize the visibility of such elements within the visual landscape. Retaining portions of the existing onsite orchard along Vesper Road and installation of the proposed landscape screening along portions of the Project perimeter would further blend the Project components into the landscape and reflect the rural character of the surrounding natural landscape. The Project is not adjacent to any open space areas; however, the Project does propose construction of a public pathway along the Project frontage on Vesper Road to provide future connection to the County's network of public trails, which may ultimately connect to public open space recreational areas. A trail would also be constructed along the west side of the Project site to provide a direct north/south connection between Vesper Road and Valley Center Road. The trail would consist of a 10-foot wide trail within a 15-foot easement.

- ☞ **COS-11.5 Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

The Project site is located adjacent to Valley Center Road (County Highway S6) which is a County designated Scenic Highway according to the Conservation and Open Space Element of the General Plan. The Project has been designed to minimize the potential visual effects of the Project components with regard to height and scale, and would be consistent with applicable requirements of the Valley Center Design Guidelines. Vegetated screening is proposed along the perimeter of the development area to screen public views into the site, and to blend the development into the surrounding landscape.

- ☞ **COS-11.7 Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

Within the Project boundaries, panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Gathering lines would connect individual panel array strings to one or more inverters/transformers and combiner boxes. Wiring from the panel strings would be connected to combiner boxes. Electrical current would then be transferred to the inverters which would convert the Direct Current (DC) produced by the PV solar panels into Alternating Current (AC).

Energy generated by the Project would be delivered to an existing 12 kV distribution line that runs parallel to Valley Center Road. An underground connection would be made from the Project site via trench under Valley Center Road. Energy generated by the Project would be delivered underground to an existing 12 kV distribution line that runs parallel to Valley Center Road; refer to Figure 3A. Connection would be made from the Project site via trench or boring under Valley Center Road. The proposed underground connection would be consistent with the San Diego General Plan Update requirement for new development to place underground utilities to “maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.”

GOAL COS-13

Dark Skies

- ∞ Preserved dark skies that contribute to rural character and are necessary for the local observatories.

Policies

- ∞ **COS-13.1 Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.
- ∞ **COS-13.2 Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.
- ∞ **COS-13.3 Collaboration to Retain Night Skies.** Coordinate with adjacent Federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

The PV solar panels would be of either mono- or polycrystalline material and would be black in color and highly absorptive. The materials used to construct the panels are designed to minimize the potential for reflection and retain as much of the solar spectrum as possible, thereby reducing glare. Additionally, based on technical evidence evaluating the reflectivity

of the PV solar panels, the proposed Project would not install highly reflective building materials that would result in a substantial increase in light or glare that would affect the surrounding area or that would produce reflective light that would create adverse disability or discomfort glare.

Limited Project lighting would be installed to allow for security. Low-level lighting would be installed at the main entry gate to facilitate access. All lighting would be operated manually or activated via motion sensors, and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements and the Valley Center Design Guidelines, as applicable.

Air Quality, Climate Change, and Energy

GOAL COS-14 – Sustainable Land Development

Policies

- 80 **COS-14.4 Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.

The Project is intended to allow for the installation and operation of a photovoltaic electrical generation facility and represents an opportunity to provide residents of Valley Center and the greater surrounding area with clean source of electrical power from renewable sources. The Project is expected to supply roughly 30-90 percent of power delivered to the Valley Center area, depending on the time of day. As future population growth continues within San Diego County, the demand for electrical service will continue to increase accordingly. The Project represents an additional clean source of electrical power that would supplement energy currently supplied by the existing power grid, thereby reducing the potential for power shortages to occur and decreasing demands on the capabilities of the existing distribution system.

The Project has been designed to respect the existing rural character of the Valley Center community with regard to scale, bulk, height, materials and color, and light and glare effects. Furthermore, design measures are proposed to require installation of landscape screening to minimize potential effects on the existing visual setting and adjacent lands.

Valley Center Community Plan

1. COMMUNITY CHARACTER

GOALS

- ∞ 1. Preserve and enhance the rural character of Valley Center by maintaining a pattern of land use consistent with the following regional categories.

B. SEMI-RURAL LANDS

- ∞ Preserve and maintain the overall rural and agricultural character of the semi-rural areas.

The Project site has a County Regional Category designation of Semi-Rural Residential, and the proposed use is allowed under the existing General Plan and zoning designations with County approval of a MUP. The proposed use is therefore consistent with the land use intended by the County for the property. Additionally, the Project has been designed to be compatible with the rural character of the Valley Center community with regard to scale, height, materials, and visual character. Vegetative screening is also proposed along the perimeter of the proposed development area in locations where views from public roads or adjacent private land ownerships may occur. No grading of the site is required, allowing onsite topography to largely remain in its present state.

2. LAND USE

GENERAL GOALS

- ∞ A pattern of development that conserves Valley Center's natural beauty and resources, and retains Valley Center's rural character.
- ∞ Development that maintains Valley Center's rural character through appropriate location and suitable site design.

Refer to the response under COMMUNITY CHARACTER, B. SEMI-RURAL LANDS, above.

COMMERCIAL GOAL

POLICIES AND RECOMMENDATIONS

- ∞ 6. Commercial/civic uses shall not interfere either functionally or visually with adjacent land uses or the rural atmosphere of the community. [PP]

The proposed Project is considered a civic use. The applicable General Plan land use designation for the site is SR-4 (Semi-Rural Residential) with a zone designation of A70 (Limited Agriculture). Due to the operational nature of the proposed PV solar facilities, and that the proposed use is allowed under the existing General Plan land use and zoning designations with approval of a MUP, the Project is not anticipated to interfere functionally with adjacent land uses. Additionally, the Project has been designed to minimize potential effects on visual resources of the surrounding Valley Center community (e.g. proposed landscape screening, distancing the development area from adjacent public roadways, and minimizing the height and scale of the Project components within the landscape) and all such effects have been determined to be less than significant.

8. Commercial/civic uses shall be periodically reviewed to ensure that the standards for noise, light, traffic, odors and all other conditions of approval are continuing to be met.

See response to Policy 6, above. Noise levels may be temporarily increased during the construction phase; however, such effects would cease once installation of the Project components was completed; refer also to the Noise Assessment (October 2011) prepared for the Project (available under separate cover). No significant noise impacts were identified during the construction or operational stages, and no mitigation measures are required.

Project lighting would be minimal and would conform to applicable County outdoor lighting standards and Valley Center Design Guidelines to avoid potential impacts on dark skies. Traffic generated by the Project would be limited to (short-term) construction traffic required for installation of the Project components and vehicle uses required for (long-term) operational and maintenance activities and would therefore not result in significant impacts on local roadways or existing circulation patterns.

Limited odors may be generated during the construction phase due to the use of equipment and vehicles (e.g. diesel fumes); however, it is anticipated that such odors would largely dissipate onsite and would cease upon completion of the construction phase. Due to the operational characteristics of the Project, the Project components would not generate odors that would affect adjacent properties.

8. Discourage commercial and civic uses outside of the Villages and limit all such uses to those that are clearly demonstrated as needed and which are compatible with the rural lifestyle of the Valley Center Community Plan.

As stated above, the Project is a civic use. The Project would result in construction of a PV solar facility for the generation of clean energy. The use is allowed under the existing General Plan land use and zoning designations with approval of an MUP, and is therefore consistent with uses intended by the County. Additionally, the Project has been designed to be compatible with the rural character of the Valley Center community with regard to scale, height, materials, and visual character. Vegetative screening is also proposed along the perimeter of the Project development area where views from public roads or adjacent private land ownerships may occur.

4. MOBILITY

GOAL

- ∞ A circulation system that achieves the combined objectives of connectivity and safety for all users (automobiles, bicyclists, equestrians and pedestrians), and also preserves the rural character of the community.

POLICIES AND RECOMMENDATIONS

- ∞ 6. Existing trees and vegetation located within the "Right-of-Way" of all public roads, and determined to be of significant visual benefit shall be transplanted or replaced consistent with the Valley Center Design Guidelines.

The removal of existing trees adjacent to Vesper Road and/or Valley Center Road is not proposed with the Project. The Project as designed would maintain two mature oaks along with several rows of citrus (orange) trees along Vesper Road to screen the proposed development area from view from the roadway, with additional plantings proposed to further enhance the effects of screening.

- ∞ 8. Woods Valley Road from Valley Center Road, east to Paradise Mountain Road and, Lilac Road from Old Castle Road to Highway 76 are significant aesthetic resources. Future improvements should maintain as much of their original character as possible without compromising safety.

Woods Valley Road is located approximately 1.65 miles to the south of Valley Center Road (and therefore, the Project site); Lilac Road/Old Castle Road at its closest point is approximately 4.2 miles to the northwest of the site. Views to the Project site from either of these roadways would not occur or would be brief and intermittent due to travel speeds and intervening vegetation and development. Views of the site would be greatly reduced due to distance from the site and the minimal height and scale of the Project components within the landscape. Installation of the Project components would not significantly change the existing visual setting from vantage points along these roads. It is therefore not anticipated that the Project would introduce elements that would adversely affect the aesthetic value or significantly alter the original visual character of these two roadways.

6. CONSERVATION

GENERAL GOALS

- ∞ Provide for a "dark sky" which would retain the rural setting and not detract from astronomical research at Palomar Mountain.

Limited Project lighting would be installed to allow for security. Low-level lighting would be installed at the main entry gate to facilitate access. All lighting would be operated manually or activated via motion sensors, and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements and Valley Center Design Guidelines, as applicable.

POLICIES AND RECOMMENDATIONS

- ∞ 17. During the discretionary permit process, encourage the dedication of trails to form a local trail network with a central unifying hub near Cole Grade and Valley Center Roads.

The Project as designed would provide for construction of a 10-foot wide pathway along the southern side of Vesper Road, consistent with County requirements and the Valley Center Community and Pathways Plan. The pathway would be constructed to the satisfaction of the County of San Diego, Director of Public Works and Director of Parks and Recreation. The pathway would be constructed along the Project frontage within the right-of-way as a condition of Project approval and would be dedicated to the County for long-term management and to allow for public recreational use. A trail would also be constructed along the west side of the Project site to provide a direct north/south connection between Vesper Road and Valley Center Road. The trail would consist of a 10-foot wide trail within a 15-foot easement.

- ∞ 18. Use low sodium lights and light shielding for new subdivisions and use permits as required by the "Dark Sky" Ordinance for those properties within a specified radius of the observatory at Palomar Mountain.

Refer to response to 6. CONSERVATION, General Goals, above.

San Diego County Zoning Ordinance

Portions of the County Zoning Ordinance that may affect the assessment of visual impacts are generally zoning overlay designators. Relevant designators include:

- ∞ B – Community Design Review Area
- ∞ D – Design Review Area
- ∞ G – Sensitive Resource
- ∞ H – Historic/Archaeological Landmark or District
- ∞ J – Special Historic District
- ∞ S – Scenic Area

None of the above designators apply to the Project site, with exception of the G designator relative to structure height.

Valley Center Design Guidelines

PART I. COMMUNITY DESIGN OBJECTIVES

Design Objective 1: Valley Center Parkway

- ∞ Designate Valley Center Road as a special Parkway serving as focus and unifying element of the community.
 - Modification of County standards to give the road a more rural character.
 - Landscape design concept to duplicate the feeling of Woods Valley Road.

Design Objectives

A. Roadway Design - Important Thoroughfares

1. Valley Center Road

- ∞ As the most important single element of the community's image, Valley Center Road should become a carefully-planned parkway serving as the focus and unifying element of the community.
- ∞ The parkway should have a planted median of trees, shrubs, grasses and granite boulders emphasizing elements of the native valley landscape. The median can be incorporated into a new roadway design when Valley Center Road is widened at a future date.

The Project would be consistent with the Valley Center Design Guidelines, as applicable. No roadway improvements are proposed along Valley Center Parkway; however, as the County plans to widen and improve Valley Center Road in the future, the Project proposes an Irrevocable Offer of Dedication (IOD) required to complete a 53-foot one-half right-of-way (ROW) width from the ultimate future centerline along the Project frontage, including slope and drainage rights for Valley Center Road. This would allow for future construction of a pathway by the County within the ROW, as appropriate, at the time when improvements to Valley Center Road are made. The Project proposes a 20-foot wide landscaped zone within the ROW. Refer also to 2. Design of the Road Edge, below.

2. Design of the Road Edge

- ∞ A twenty-foot deep landscaped edge zone is to be provided along the entire length of Valley Center, Cole Grade, Woods Valley and Lilac Roads. The edge zone will reinforce Valley Center's character as a rural residential community by emphasizing planting of

native vegetation, low walls of local stone, wood rail and agricultural fences to give the road edge visual definition and continuity. The edge zone is a requirement for new development in the community. Criteria for its design are given in Design Guideline, "Design of the Road Edge."

The Project design provides for a 20-foot wide landscaped edge zone along the Project frontage on Valley Center Road; refer to Figure 3C, Conceptual Landscape Plan. The proposed landscaping is intended to reflect the existing rural character of the surrounding community, as well as to screen views into the Project site from the roadway and provide a sense of visual continuity with adjoining properties along the road edge.

3. *Underground Utilities*

- ∞ The undergrounding of overhead utilities on Valley Center Road should be implemented as soon as possible. The community is committed to reducing the present harmful visual impact of utility poles and wires throughout Valley Center.

Within the Project boundaries, panel arrays would be electrically connected into panel strings using wiring attached to the racking. Panel strings would be electrically connected to each other via underground wiring. Gathering lines would connect individual panel array strings to one or more inverters/transformers and combiner boxes, and wiring from the panel strings would be connected to combiner boxes. Electrical current would then be transferred to the inverters which would convert the DC produced by the PV panels into AC.

Energy generated by the Project would be delivered to an existing 12 kV distribution line that runs parallel to Valley Center Road. An underground connection would be made from the Project site via trench under Valley Center Road.

PART III. THE DESIGN GUIDELINES

1. *Site Design Process*

B. *Site Design Concept*

1. *Relationship to the Community and Neighboring Properties*

- ∞ Does the site plan respect the existing views, privacy, quiet, sun and light exposure of neighboring properties?

The proposed Project components have been designed to minimize potential impacts on visual resources and to ensure that the Project does not conflict with the rural character of the surrounding Valley Center Community. Project design measures that limit the height and scale of Project components, as well as vegetative landscape screening along portions of the

Project perimeter where public and/or private views into the site would potentially occur are proposed to reduce potential impacts on neighboring properties. Due to the limited height and scale of the Project components (maximum height of 11.5 feet for the panels; maximum height of 11 feet for the inverter enclosures/platforms), the Project would not block access to sunlight on neighboring properties, and due to the operational character of the proposed PV solar facilities, impacts on surrounding land uses with regard to noise would be less than significant.

2. Relationship to Existing Natural Features

- ⌘ Has the project made a sufficient effort to minimize grading and alteration of natural landforms?

Although the majority of land surface in the MUP area is flat, portions would be cleared and grubbed to allow for installation of the panels and associated facilities. No onsite or offsite grading is proposed. Therefore, the existing topography of the site would largely remain in its natural state.

- ⌘ Does the project retain important vegetation, rock outcroppings, and other natural features?

No rock outcroppings or other significant natural features are present within the existing natural onsite landscape. As noted above, although the majority of land surface within the proposed MUP area is flat, portions would be cleared and grubbed to allow for installation of the PV solar panels and associated facilities. No onsite or offsite grading is proposed. Therefore, the topography of the site would largely remain in its natural state.

The Project as designed would retain the two existing mature oaks, as well as several rows of existing orange trees within the onsite orchard, along the frontage with Vesper Road. The removal of any existing onsite trees is not proposed with the Project.

2. Protection of Natural Features

Guidelines

A. Hierarchy of Importance.

- ⌘ Development on all sites will require judgment about which natural features are most important to preserve. Although a consistent rule is not possible, the general order of importance in retention shall be:
 - (1) Natural contours and landforms;
 - (2) Large rock outcroppings;
 - (3) Natural drainage courses;
 - (4) Oak and sycamore trees;

- (5) Other mature specimen trees; and,
- (6) Views.

C. Other mature trees should be retained where feasible.

- ✎ This will require careful judgment weighing the value and hierarchy of all natural features, the size and species of the tree, and the developer's program for the site. This should not preclude removal of noxious or undesirable trees.

Although the majority of land surface in the MUP area is flat, portions would be cleared and grubbed to allow for installation of the panels and associated facilities. No onsite or offsite grading is proposed. Therefore, the existing topography of the site would largely remain in its natural state. No rock outcroppings are present onsite.

The Project as designed would retain the two existing mature oaks, as well as several rows of existing orange trees within the onsite orchard, along the frontage with Vesper Road. The removal of any existing onsite trees is not proposed with the Project.

Potential impacts on visual resources resulting with implementation of the proposed Project would be reduced through design measures which include minimizing height and scale of the Project components within the landscape, distancing the Project components from adjacent public roadways, and providing landscape screening along Vesper Road and Valley Center Road, as well as along other portions of the Project boundary, to reduce potential public and private views into the development area.

D. Topography

- ✎ Building pads are to be sited within the zoned setbacks and are to disturb the natural contours as little as possible. Balancing of cut and fill areas is encouraged. See "Save the Oaks and Sycamores" (Guideline 3) for grading techniques necessary for the preservation of existing oaks.

As noted above, although the majority of land surface within the proposed MUP area is flat, portions would be cleared and grubbed to allow for installation of the PV solar panels and associated facilities. No onsite or offsite grading is proposed. Therefore, the topography of the site would largely remain in its natural state.

The Project as designed would retain the two existing mature oaks, as well as several rows of existing citrus (orange) trees within the onsite orchard, along the frontage with Vesper Road. The removal of any existing onsite trees is not proposed with the Project.

F. Views

- ✎ Existing views important to neighboring properties shall be studied and preserved where feasible. New site plans for housing should take advantage of potential views from the site. Two types of views are important:

- Views from adjoining roads and lots through the site; and,
 - Views from within the site.
- ∞ Natural features worth “viewing” include mountains, valley views, open spaces of existing flood plains, streams, lakes, tree stands, and western horizons.

No mountains, designated open space, flood plains, streams or lakes occur on the Project site. Views to the western horizon would generally be obscured, due to existing development and vegetation on adjacent lands, as well as the unvaried elevational differences of the Project site and surrounding lands. As stated above, the Project as designed would retain the two existing mature oaks, as well as several rows of existing orange trees within the onsite orchard, along the frontage with Vesper Road. The removal of any existing onsite trees is not proposed with the Project. Design measures are proposed to reduce the visibility of the site within the existing landscape and ensure that impacts to views of the valley within the surrounding viewshed are not significantly altered or disrupted with implementation of the proposed Project.

4. Design of the Road Edge – Valley Center, Cole Grade, Lilac, and Woods Valley Roads

A. Landscaped Edge Zone

- ∞ A minimum 20 feet deep landscaped zone (the front 20 feet of the property) shall be located along the major road edge, interrupted only by permitted access driveways and sidewalks. No buildings or off-street parking areas are to be located in this zone.

A 20-foot wide landscaped zone is proposed along the Project frontage on Valley Center Road, consistent with requirements of the Valley Center Design Guidelines; refer to Figure 3C, Conceptual Landscape Plan. The existing access drive within this zone off of Valley Center Road would remain following Project implementation; however, the existing access would be gated and locked (Knox box), and restricted to emergency use only, with primary access to the Project site occurring from Vesper Road. No buildings or off-street parking areas are proposed for location within this zone.

C. Character and Elements

- ∞ The landscaped zone should reinforce Valley Center's character as a rural residential community. If walls or fences are used in landscaping, low walls of native stone, wooden rail fences, agricultural fences, placement of native rocks and boulders are recommended to give the road edge zone visual definition and prominence. Gateways and driveways may be given special emphasis.

Refer also to response to A. Landscaped Edge Zone, above. As allowed by the Valley Center Design Guidelines, the Project would install a 6-foot tall chain-link fence (plus one foot of two-strand barb wire) for security purposes along the perimeter of the proposed development

area, including along Vesper Road and Valley Center Road, thereby contributing to the screening of views into the site from offsite public vantage points. Although the Valley Center Design Guidelines discourage the use of chain link fencing, the Project design includes landscaping (existing and proposed) along the perimeter of the fence to screen both views of the fence and of the Project components. Landscaping is proposed along the perimeter of the Project site where adjacent residential uses are present or where private views may occur if the offsite intervening vegetation is removed. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite private vantage points. Landscape screening is also proposed along the fence fronting onto Valley Center Road and Vesper Road to reduce views of the fence and to reflect the surrounding visual setting; refer to Figure 3C, Conceptual Landscape Plan, of the Visual Resources/Aesthetics Impact Analysis which illustrates the type and location of the landscape screening proposed.

F. *Signs in conformance with the Design Guidelines are permitted*

Minimal Project signage is proposed to allow for the identification of the Project owner and for safety and security purposes. Signage is proposed to be installed on the fence in the vicinity of the main entry gates off of Vesper Road. Signage would identify the Project operator and owner as Sol Orchard, LLC, and would provide emergency contact information and guidance for emergency responders. All signage would conform to County of San Diego and Valley Center Design Guidelines signage requirements, as applicable. No freestanding signage is proposed as part of the Project.

5. Architectural Character

E. *Walls, Fences and Accessory Structures*

1. *Fences and Walls*

- ⌘ Fences and walls are used to provide security, visual privacy, and/or define a space. The impact of a fence or wall on the surrounding neighborhood is determined by its size, type, layout, and character. Fences and walls should be minimized along public streets.
- ⌘ Walls and fences should be designed to be compatible with the surrounding landscape and architectural concept.
- ⌘ The following is a list of wall and fence materials whose use is not acceptable:
 - Chain link or open wire, except in landscape-screened service or security areas.
 - Corrugated metal
 - Bright colored plastic
 - Reed material

Access to the site would be provided from the existing driveway from Vesper Road. The entry would be gated and locked for purposes of security. As allowed by the Valley Center Design Guidelines, the Project would install a 6-foot tall chain-link security fence (plus one foot of two-strand barb wire) along the perimeter of the development area, including along Vesper Road and Valley Center Road, thereby contributing to the screening of views into the site from offsite vantage points. Although the Valley Center Design Guidelines discourage the use of chain link fencing, the Project design includes landscaping (existing and proposed) along the perimeter of the fence to screen both views of the fence and of the Project components. Landscaping is proposed along the perimeter of the Project site where adjacent residential uses are present or where private views may occur if the offsite intervening vegetation is removed. The planting of such landscaping shall be made a Condition of Approval of the MUP to ensure that views of the Project components are minimized from such offsite private vantage points. Landscape screening is also proposed along the fence fronting onto Valley Center Road and Vesper Road to reflect the surrounding visual landscape and enhance visual privacy for the site; refer to Figure 3C, Conceptual Landscape Plan, of the Visual Resources/Aesthetics Impact Analysis which illustrates the type and location of the landscape screening proposed. Refer also to response 4.C, above.

8. Visual Linkages between Planting, Buildings, and Open Spaces

Guidelines

- ✎ Tree masses are a valuable means of defining outdoor spaces and visually linking a site development to the larger community landscape.
- ✎ Trees planted in rows along roads, site boundaries and in orchards are common in rural areas and may be used in similar patterns where site conditions suggest.

The Project as designed would retain the two existing mature oaks, as well as several rows of existing orange trees within the onsite orchard, along the frontage with Vesper Road. The removal of any existing onsite trees is not proposed with the Project.

Landscaping in the form of evergreen vine, such as bougainvillea species, Guinea gold vine, Japanese honeysuckle and/or star jasmine, would be planted to screen views into the site from private land ownerships adjacent to the property. Additionally, Toyon and coast live oak would be planted along the southern exposures including along the boundary of the site near Valley Center Road.

9. Planting Design and Plant Lists

Guidelines

A. Planting Design Principles

- ∞ Valley Center is a rural community. To protect its rural atmosphere, new plantings must be compatible with the existing natural landscape and desired community character, both in form and arrangement.
 - 1. Roadway and road edge planting on private property should reflect:
 - a. The natural grouping of trees in clusters, as opposed to traditional rigid alignment in urban areas.
 - b. Limited use of shrubs in plantings with trees and ground covers. Arid plant communities do not naturally support a great number of plants.
 - c. Naturalized plant arrangements as opposed to stylized.

Refer to response to 8. Visual Linkages between Planting, Buildings, and Open Spaces, above. All proposed landscape screening would be provided consistent with the Valley Center Design Guidelines and County landscape design requirements, as applicable.

11. Site Lighting

A. General Requirements

- ∞ Site lighting shall be limited to that necessary for security, safety, and identification. Other uses of site lighting for accent or decorative purposes is discouraged, except when provided by low-level fixtures and done in a careful manner. The Design Review Board will not recommend lighting plans that conflict with community character or provide excessive levels of lighting.

D. Site Lighting Fixtures

- ∞ Fixtures should be compatible with the architectural character of the buildings served.

Limited Project lighting would be installed to allow for ongoing maintenance and security. Low-level lighting would be installed at the main entry gates on Vesper Road to allow for safe ingress/egress. All Project lighting would be operated manually or activated via motion sensors, and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. All lighting would conform to County of San Diego outdoor lighting requirements and the Valley Center Design Guidelines, as appropriate.